

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



June 12, 2009

**Advice Letter 3422-E-A**

Brian K. Cherry  
Vice President, Regulatory Relations  
Pacific Gas and Electric Company  
77 Beale Street, Mail Code B10C  
P.O. Box 770000  
San Francisco, CA 94177

**Subject: Supplement – Establishment of Schedule NEMVNMA – Virtual Net Energy Metering (VNM) Service for Individually Metered Residential Units and Owners with Housing Receiving Incentives from the Multifamily Affordable Solar Housing (MASH) Program or the New Solar Homes Partnership Program (NSHP) Affordable Housing**

Dear Mr. Cherry:

Advice Letter 3422-E-A is effective June 8, 2009.

Sincerely,

A handwritten signature in blue ink that reads "Julie A. Fitch".

Julie A. Fitch, Director  
Energy Division



April 10, 2009

**Advice 3422-E-A**

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California (CPUC)

**Subject: Supplement: Advice 3422-E -- Establishment of Schedule NEMVNMA—Virtual Net Energy Metering (VNM) Service for Individually Metered Residential Units and Owners with Housing Receiving Incentives from the Multifamily Affordable Solar Housing (MASH) Program or the New Solar Homes Partnership Program (NSHP) Affordable Housing**

Pacific Gas and Electric Company (PG&E) hereby submits for filing new electric tariffs, in compliance with California Public Utilities Code section 2827 and CPUC Decision (D.) 08-10-036.

**Purpose**

At the request of the California Public Utilities Commission (CPUC) Energy Division, PG&E submits this supplemental advice letter to Advice 3422-E to request approval of the revised new electric rate schedule, *Net Energy Metering for Virtual Net Energy Metering* (NEMVNMA), new electric form, 79-1109 and revisions to electric rate schedule NEM.

This supplemental advice letter replaces Advice 3422-E, filed February 13, 2009, in its entirety.

**Background**

On February 13, 2009 PG&E submitted Advice 3422-E in compliance with D.08-10-036. Since the filing of that advice letter PG&E has had numerous discussions with the CPUC Energy Division regarding the proposed NEMVNMA tariff and new electric form 79-1109. As a result of these discussions, PG&E submits this supplemental advice letter to revise the tariffs as modified by the CPUC Energy Division.

## **Tariff Revisions**

Please see the attached revised tariff sheets for Rate Schedule NEMVNMA, Rate Schedule NEM and Electric Form 79-1109.

Summary of the significant changes:

### **Rate Schedule NEMVNMA – Net Energy Metering for Virtual Net Energy Metering**

- PG&E modifies the title of the new electric rate schedule NEMVNM to NEMVNMA. PG&E prefers to use “NEMVNMA” in order to keep the “VNM” designation in the name, since this acronym was employed in D.08-10-036 (page 15, the end of section 5.1), and has become a common way of referring to the new tariff. The “A” was requested to refer to “affordable housing” since there may be in the future be another tariff for VNM that will be used for commercial and non-low income customers.
- Revised the tariff’s descriptive title to refer specifically to the Multifamily Affordable Solar Housing (MASH) program. Also, the Energy Division clarified that the NEMVNMA eligibility applies to any solar generation, not just photovoltaic (PV) based generation.
- Moved the 1 megawatt size limit to the opening sentence of the applicability.
- Changed the reference to PG&E’s “transmission and distribution system” to “electric system”, to match a new definition that will be added to Rule 21 soon
- Added two additional conditions that NEMVNMA will be available until December 31, 2015 or until MASH funds are exhausted.
- Added language based on D.08-10-036 (bullet 3 page 38) which required that “the annual solar energy credits allocated to the common area and to each of the tenant meters may not exceed the associated estimated load (in kilowatt hours) for the coming year.” The incentive program (MASH or NSHP) requires an estimate of the load, and this estimate will be used to fulfill this requirement in the NEMVNMA tariff.
- Moved under the Owner Obligations section (a), language relating to safety and performance. This language was originally in Special Condition 3, Interconnections.
- Retained language under Owner Obligation section (d). The Energy Division requested that PG&E delete this language about complying with all the requirements of the NEM tariff, but it is stated in D.08-10-036 page 38, “Each utility’s VNM tariff must comply with § 2827...”, upon which the NEM tariff is directly based. Therefore, PG&E will retain this language.

- Adopted various clarifying language changes to Special Condition 2 (“Billing”), in section (c) and (d).
- Agreed to added consistent language to better describing annual true-up to both the NEM tariff and the NEMVNMA tariff at some future time.
- Incorporated language to Special Condition 2(e), distinguishing between the requirement that residential and Small Commercial have the option to pay monthly while all other (other typically larger commercial and agricultural) must pay monthly for any usage.
- In Special Condition 2(f), at the Energy Division’s request, removed the paragraph allowing solar energy allocation (kwh) from a temporarily unoccupied tenant unit to be allocated to a common area account. This might conflict with D.08-10.036 by allowing the proportion of common area to tenant area Solar Energy Allocation Percentage to change, whereas the decision says it must be fixed for 5 years.
- Removed language in several places that referred to “bundled customers”. CCA and Direct Access are not addressed in this tariff, but will be considered at some future time.

#### Electric Form 79-1109

- Changed the name of the form to be consistent with that of the NEMVNMA tariff.
- Eliminated duplicative language in Section II.2(b) and (c), by rewording the sections and referencing the same footnote with a web link in two places.
- Eliminated a column in the equipment tables in Section IV(B). In the first table for inverters, the column removed was for the “Inverter CEC Rate kW”; in the second table for pv panels, the column removed was for “PV Nameplate Rating kW”. This information is supplied by PG&E from existing tables, so applicants do not need to fill this out.
- On Appendix A, revised the title to be consistent with the NEMVNMA tariff, made various changes for consistency. Also removed the column in the Account table that was going to be used to designate the common area account that was to receive the solar energy allocation credit (kWh) when a tenant unit was unoccupied. This makes the form consistent with the removal of the same provision from the NEMVNMA tariff.

#### Revisions to Rate Schedule NEM

- The reference to the tariff name, NEMVNMA, was changed to be consistent a requested name change to the NEMVNMA tariff.

**Filing Requirement**

The CPUC Energy Division requested that PG&E file a supplemental advice letter to Advice 3422-E no later than April 10, 2009.

**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 **April 30, 2009**, which is 20 days after the date of this filing. Protests should be mailed to:

CPUC Energy Division  
Tariff Files, Room 4005  
DMS Branch  
505 Van Ness Avenue  
San Francisco, California 94102

Facsimile: (415) 703-2200  
E-mail: [ijnj@cpuc.ca.gov](mailto:ijnj@cpuc.ca.gov) and [mas@cpuc.ca.gov](mailto:mas@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:

Brian K. Cherry  
Vice President, Regulatory Relations  
Pacific Gas and Electric Company  
77 Beale Street, Mail Code B10C  
P.O. Box 770000  
San Francisco, California 94177

Facsimile: (415) 973-7226  
E-mail: [PGETariffs@pge.com](mailto:PGETariffs@pge.com)

**Effective Date**

PG&E requests that this advice filing become effective on regular notice, **May 11, 2009**, which is 31 calendar days after the date of filing. PG&E submits this advice letter as a Tier 2 filing.

**Notice**

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and on the service list for Rulemaking (R.) 08-03-008. Address changes to the General Order 96-B service list 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 cursive script that reads "Brian H. Cheng / dc". The signature is written in a dark ink and is positioned centrally below the main text block.

Vice President, Regulatory Relations

Attachments

cc: Service List R.08-03-008

# 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 (ID U39 M)**

Utility type:

ELC

GAS

PLC

HEAT

WATER

Contact Person: Daren Chan

Phone #: (415) 973-5361

E-mail: D1CT@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) #: **3422-E-A**

**Tier: 2**

Subject of AL: Supplement: Advice 3422-E -- Establishment of Schedule NEMVNMA—Virtual Net Energy Metering (VNM)

Keywords (choose from CPUC listing): Compliance

AL filing type:  Monthly  Quarterly  Annual  One-Time  Other \_\_\_\_\_

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: D.08-10-036

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

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

Is AL requesting confidential treatment? If so, what information is the utility seeking confidential treatment for: No

Confidential information will be made available to those who have executed a nondisclosure agreement: N/A

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information:

Resolution Required?  Yes  No

Requested effective date: **May 11, 2009**

No. of tariff sheets: 15

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: NEMVNMA, NEM, Electric Form 79-1109

Service affected and changes proposed: N/A

Protests, dispositions, 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**

**Tariff Files, Room 4005**

**DMS Branch**

**505 Van Ness Ave., San Francisco, CA 94102**

**jnj@cpuc.ca.gov and mas@cpuc.ca.gov**

**Pacific Gas and Electric Company**

**Attn: Brian K. Cherry, Vice President, Regulatory Relations**

**77 Beale Street, Mail Code B10C**

**P.O. Box 770000**

**San Francisco, CA 94177**

**E-mail: PGETariffs@pge.com**

**Cal P.U.C.  
Sheet No.**

**Title of Sheet**

**Cancelling Cal  
P.U.C. Sheet No.**

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28281-E	ELECTRIC SCHEDULE NEM NET ENERGY METERING SERVICE Sheet 1	27236-E
28282-E	ELECTRIC SCHEDULE NEMVNMA VIRTUAL NET ENERGY METERING FOR MULTIFAMILY AFFORDABLE HOUSING (MASH) WITH SOLAR GENERATOR(S) Sheet 1	
28283-E	ELECTRIC SCHEDULE NEMVNMA VIRTUAL NET ENERGY METERING FOR MULTIFAMILY AFFORDABLE HOUSING (MASH) WITH SOLAR GENERATOR(S) Sheet 2	
28284-E	ELECTRIC SCHEDULE NEMVNMA VIRTUAL NET ENERGY METERING FOR MULTIFAMILY AFFORDABLE HOUSING (MASH) WITH SOLAR GENERATOR(S) Sheet 3	
28285-E	ELECTRIC SCHEDULE NEMVNMA VIRTUAL NET ENERGY METERING FOR MULTIFAMILY AFFORDABLE HOUSING (MASH) WITH SOLAR GENERATOR(S) Sheet 4	
28286-E	ELECTRIC SCHEDULE NEMVNMA VIRTUAL NET ENERGY METERING FOR MULTIFAMILY AFFORDABLE HOUSING (MASH) WITH SOLAR GENERATOR(S) Sheet 5	



Cal P.U.C.  
Sheet No.

Title of Sheet

Cancelling Cal  
P.U.C. Sheet No.

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28287-E	ELECTRIC SCHEDULE NEMVNMA VIRTUAL NET ENERGY METERING FOR MULTIFAMILY AFFORDABLE HOUSING (MASH) WITH SOLAR GENERATOR(S) Sheet 6
28288-E	ELECTRIC SCHEDULE NEMVNMA VIRTUAL NET ENERGY METERING FOR MULTIFAMILY AFFORDABLE HOUSING (MASH) WITH SOLAR GENERATOR(S) Sheet 7
28289-E	ELECTRIC SCHEDULE NEMVNMA VIRTUAL NET ENERGY METERING FOR MULTIFAMILY AFFORDABLE HOUSING (MASH) WITH SOLAR GENERATOR(S) Sheet 8
28290-E	ELECTRIC SCHEDULE NEMVNMA VIRTUAL NET ENERGY METERING FOR MULTIFAMILY AFFORDABLE HOUSING (MASH) WITH SOLAR GENERATOR(S) Sheet 9
28291-E	ELECTRIC SCHEDULE NEMVNMA VIRTUAL NET ENERGY METERING FOR MULTIFAMILY AFFORDABLE HOUSING (MASH) WITH SOLAR GENERATOR(S) Sheet 10
28292-E	VIRTUAL NET ENERGY METERING APPLICATION AND INTERCONNECTION AGREEMENT FOR THE BUILDING OWNER OF MULTIFAMILY AFFORDABLE HOUSING WITH A SOLAR GENERATING FACILITY OF 1 MEGAWATT OR LESS Sheet 1

**ATTACHMENT 1  
Advice 3422-E-A**

<b>Cal P.U.C. Sheet No.</b>	<b>Title of Sheet</b>	<b>Cancelling Cal P.U.C. Sheet No.</b>
28293-E	ELECTRIC TABLE OF CONTENTS Sheet 1	28263-E
28294-E	ELECTRIC TABLE OF CONTENTS RATE SCHEDULES Sheet 4	28173-E
28295-E	ELECTRIC TABLE OF CONTENTS SAMPLE FORMS Sheet 14	27822-E



**ELECTRIC SCHEDULE NEM**  
**NET ENERGY METERING SERVICE**

Sheet 1

**APPLICABILITY:** This net energy-metering schedule is applicable to a customer who uses a solar or wind turbine electrical generating facility, or a hybrid system of both, with a capacity of not more than 1,000 kilowatts that is located on the customer's owned, leased, or rented premises, is interconnected and operates in parallel with PG&E's transmission and distribution systems, including wind energy co-metering customers as defined in California Public Utilities Code Section 2827.8, and is intended primarily to offset part or all of the customer's own electrical requirements (hereinafter "eligible customer-generator" or "customer"). Certain incremental billing and metering costs set forth in this schedule that are related to net energy metering are applicable to Energy Service Providers (ESPs) serving eligible customer-generators.

This service is not applicable to a Direct Access (DA) or Community Choice Aggregation Service (CCA Service) customer where the customer's ESP or Community Choice Aggregator (CCA) does not offer a net energy metering tariff. In addition, if an eligible customer-generator participates in direct transactions with an ESP that does not provide distribution service for the direct transactions, the ESP, and not PG&E, is obligated to provide net energy metering to the customer.

This rate schedule is available on a first-come, first-served basis to customers that provide PG&E with: (a) a completed Net Energy Metering Application including all supporting documents and required payments; AND (b) a completed signed Net Energy Metering Interconnection Agreement; AND (c) evidence of the customer's final inspection clearance from the governmental authority having jurisdiction over the generating facility; until such time as the total rated generating capacity used by eligible customer-generators on Rate Schedule NEM and NEMVNMA exceeds two and one-half (2.5) percent of PG&E's aggregate customer peak demand. (T)

Customers seeking generator interconnections in portions of San Francisco and Oakland where PG&E has a network grid must contact PG&E about generation export limitations.

Schedule NEM applies also to specified net energy metering eligible (NEM-eligible) generators in a generating facility comprised of multiple NEM- and non-NEM-eligible generators, served through the same Point of Common Coupling (PCC), where the NEM-eligible generating capacity is not more than 1 MW. Such facilities will be referred to as Multiple Tariff Facilities, and any group of generators within such a facility that 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-generator must meet all the requirements of Special Condition 6 for the schedule NEM-eligible generator, and must also meet any other applicable tariffs.

Due to the complexity of Multiple Tariff Facilities NEM generating facilities interconnecting under the provisions of Special Condition 6 may require additional review and/or interconnection facilities and other equipment, and may incur interconnection costs, as provided for in electric Rule 21.

(Continued)



**ELECTRIC SCHEDULE NEMVNMA**  
**VIRTUAL NET ENERGY METERING FOR MULTIFAMILY**  
**AFFORDABLE HOUSING (MASH/NSHP) WITH SOLAR GENERATOR(S)**

Sheet 1

APPLICABILITY: This virtual net energy-metering schedule is applicable to Customers with Bundled Service Accounts, who operate (a) solar generator(s) of not more than 1,000 kW in parallel with PG&E's electric system, all on the same Premises, for either: (N)

- a. an existing building or buildings served from one Customer Service Delivery Point, as defined in Rule 16, with PG&E's Distribution System that received incentives under PG&E's California Solar Initiative (CSI) Multifamily Affordable Solar Housing (MASH) Program\*, or
- b. new, "Affordable Housing" consisting of one or more buildings serviced from one Customer Service Delivery Point, as defined in Rule 16, with PG&E's Distribution System that received incentives under the New Solar Homes Partnership (NSHP)\*\* Program in PG&E's service territory.

Either such arrangement is called an "Eligible Low Income Facility."

NEMVNMA is available on a first-come, first-served basis to Customers with an Eligible Low Income Facility that provide PG&E with:

- a. a completed NEMVNMA application and interconnection agreement as described in Special Condition 3, including all supporting documents and required payments; AND
- b. evidence of the final inspection clearance from the governmental authority having jurisdiction over the Solar Generating Facility; until such time as the total rated generating capacity on Rate Schedules NEM and NEMVNMA exceeds two and one-half (2.5) percent of PG&E's aggregate peak demand until December 31, 2015, or until all funds available for the incentives have been allocated, whichever comes first.

**Generator Size** - Size the generator(s) no larger than for the energy requirements of all eligible account types of the past year for existing housing and estimated requirements of new housing. Specific size limits will be determined by the relevant incentive program (MASH or NSHP).

\* Pursuant to CPUC Decision 08-10-036, "The MASH Program is targeted at existing multifamily affordable housing that meets the definition of low-income residential housing set forth in Pub. Util. Code 2852. Specifically, this means multifamily housing financed with low-income housing tax credits, tax-exempt mortgage revenue bonds, general obligation bonds, or local, state or federal loans or grants. The housing must also meet the definition of low-income households in Health and Safety Code 50079.5 (p. 6). Under the MASH program, the portion of the system offsetting common area load would receive Track 1A incentives, and the portion offsetting tenant load would receive Track 1B incentives."

\*\* Pursuant to Public Resources Code 25401.6, to be eligible as a NSHP "affordable housing" means:

- a. In its administration of Section 25744, the Commission shall establish a separate rebate for eligible distributed emerging technologies for affordable housing projects including, but not limited to, projects undertaken pursuant to Section 50052.5, 50053, or 50199.4 of the Health and Safety Code. In establishing the rebate, where the Commission determines that the occupants of the housing shall have meters, the Commission may adjust the amount of the rebate based on the capacity of the system, provided that a system may receive a rebate only up to 75 percent of the total installed costs. The Commission may establish a reasonable limit on the total amount of funds dedicated for purposes of this section;
- b. It is the intent of the Legislature that this section fulfills the purpose of paragraph (5) of subdivision (b) of Section 25744.

(Continued)



**ELECTRIC SCHEDULE NEMVNMA**  
 VIRTUAL NET ENERGY METERING FOR MULTIFAMILY  
 AFFORDABLE HOUSING (MASH/NSHP) WITH SOLAR GENERATOR(S)

Sheet 2

APPLICABILITY:  
 (Cont'd.)

**Network Grid Limitations** – Portions of San Francisco and Oakland, where PG&E has a network grid, have generation export limitations. Customers seeking generator interconnections in San Francisco and Oakland must contact PG&E before beginning any work.

**Account Types** – Three types of Accounts in an Eligible Low Income Facility are covered by this tariff:

- a. Generator Account– the Account where the up to one megawatt solar photovoltaic generator facility (Solar Generating Facility) is interconnected and for which the Eligible Low Income Facility owner or a party they designate (“Owner”), is the PG&E Customer. The Generator Account must have no load other than that required by the Solar Generating Facility itself and must not be included as part of a Common Area Account. If there is more than one solar generator, they must all be interconnected on this Account.
- b. Common Area Account– each load-only Account for a common area, if any, and for which the Owner is the PG&E Customer.
- c. Residential Unit Account – each load-only account for a residential unit located in the Eligible Low Income Facility, and for which an occupant is the PG&E Customer.

Any Account that includes load, except one that includes only Solar Generating Facility load or as otherwise provided in NEMVNMA, is referred to as a “Customer Load Account”.

**Owner Obligations** – The Owner must:

- a. comply with all applicable safety and performance standards as delineated in PG&E’s Electric Rule 21 and other applicable tariffs, 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. The Owner is solely responsible for the ongoing maintenance and operation of the Solar Generating Facility;
- b. keep in force the amount of property, commercial general liability and/or personal liability insurance the Owner has in place at the time they initiate service on this tariff;
- c. agree that PG&E may from time to time release to the California Energy Commission and/or the California Public Utilities Commission, information regarding the Eligible Low Income Facility, including the Owner’s name, and Solar Generating Facility location, capacity and operational characteristics, and Customer names at the Residential Unit Accounts; AND
- d. agree to comply with all applicable rules and requirements of PG&E’s Net Energy Metering tariffs

(Continued)



**ELECTRIC SCHEDULE NEMVNMA**  
 VIRTUAL NET ENERGY METERING FOR MULTIFAMILY  
 AFFORDABLE HOUSING (MASH/NSHP) WITH SOLAR GENERATOR(S)

Sheet 3

**APPLICABILITY:** (Cont'd.) **Modifications to Solar Generating Facility** – If the Eligible Low Income Facility’s Solar Generating Facility has not been previously approved for interconnection by PG&E, or where any modification to the previously approved Solar Generating Facility has been made, the Owner must complete the interconnection process in Special Condition 3 of this tariff.

**Change in Owner** – A change in the Owner responsible for the Eligible Low Income Facility (“Change of Owner”), where no modification to the Solar Generating Facility has been made, does not need to complete the interconnection process in Special Condition 3, as long as the requirements of this section are met.

**RATES:** The rate and charges at each Customer Load Account and the Generator Account under this schedule will be in accordance with its PG&E otherwise-applicable metered rate schedule (OAS). The customer at each Customer Load Account or Generator Account served under this schedule is responsible for all charges from its OAS including monthly minimum charges, customer charges, meter charges, facilities charges, demand charges and surcharges. For Generator and Common Area Accounts on general service OASs, the “Average Rate Limiter” and all other demand charges will be based on the demand in kilowatts as measured only on the energy being consumed at the Common Area Account or Generator Account from PG&E. The power factor, when it applies on the OAS, will be based on the energy consumed at the Account from PG&E and the average power factor over the past 12 billing months of operation prior to starting on NEMVNMA. A Generator or Common Area Account, without 12 billing months of power factor history, will have its power factor estimated based on the nature of the connected loads and their hours of operation. Power factor will be subsequently applied to the bill at the Generator or Common Area Account until the customer demonstrates to PG&E’s satisfaction that adequate correction had been provided. PG&E will continue to monitor and review the power factor and if warranted, change the power factor correction on the Generator or Common Area Account’s bills.

Charges for energy (kWh) supplied by PG&E will be based on the net metered usage in accordance with Billing (Special Condition 2, below).

For each Service Account, the energy rates and customer charges will be in accordance with their OAS.

Generator Accounts eligible for service under NEMVNMA are exempt from the requirements of Schedule S—*Standby Service*.

**SUB SCHEDULES:** Eligible customers will be placed on the appropriate sub-schedule as described below:

1. NEMVNMA G— For Generator Accounts
2. NEMVNMA C – For Common Area Accounts
3. NEMVNMA R – For Residential Unit Accounts

(Continued)



**ELECTRIC SCHEDULE NEMVNMA**  
 VIRTUAL NET ENERGY METERING FOR MULTIFAMILY  
 AFFORDABLE HOUSING (MASH/NSHP) WITH SOLAR GENERATOR(S)

Sheet 4

**SPECIAL  
 CONDITIONS:**

1. METERING: NEMVNMA net energy metering shall be accomplished at:
  - a. The Generator Account where the Solar Generating Facility is located, using a PG&E meter capable of recording solar energy system output in up to fifteen minute increments. The Owner shall be responsible for, and shall bear all costs associated with providing and installing such a meter.
 

If the Account has any load in addition to that of the solar energy system inverter(s), PG&E reserves the right to require the Owner to install a bi-directional PG&E meter appropriate to its otherwise applicable rate schedule and a generator output meter to determine the total generation and total usage at the Account. Additionally, the Owner will need to furnish at the Owner's expense a meter socket for the generation output meter and provide PG&E with unrestricted access to that meter and socket. If the Generator Account's existing electrical meter, together with the generation output meter, is not capable of determining the total usage necessary to bill its otherwise applicable rate schedule, the Owner shall be responsible for all expenses involved in purchasing and installing such metering.
  - b. Each Common Area Account, if any exist, using PG&E metering appropriate to its otherwise applicable rate schedule.
  - c. Each Residential Unit Account using PG&E metering appropriate to its otherwise applicable rate schedule.

2. BILLING:

For each Customer Load Account, Consumption or production shall be valued as follows:

- a. Annual Solar Energy Credit

The Annual Solar Energy Credit is the total energy (in kilowatt hours or kWh as read on the generation output meter over the Relevant Period as defined in Special Condition 2 g.

(Continued)



**ELECTRIC SCHEDULE NEMVNMA**  
 VIRTUAL NET ENERGY METERING FOR MULTIFAMILY  
 AFFORDABLE HOUSING (MASH/NSHP) WITH SOLAR GENERATOR(S)

Sheet 5

SPECIAL  
 CONDITIONS:  
 (Cont'd.)

2. BILLING (Cont'd.):

b. The Annual Solar Energy Credit Allocation

The Owner at the time the Eligible Low Income Facility first takes service under NEMVNMA shall determine the initial percentage of Annual Solar Energy Credits allocated to the Common Area Account(s) versus the Residential Unit Accounts. This allocation shall remain fixed for at least five years, regardless of a Change in Owner. If incentives are received under the MASH program, the initial credit allocation must match the percentage of MASH incentive received for Track 1a (Common Area load offset) and Track 1b (Residential load offset).

After the initial five year period, the Owner may only modify this allocation once in any 12 month period. A reallocation of the solar credit becomes effective for each Customer Load Account on the first day of the next Billing Cycle where the Billing Cycle start date occurs at least five business days after the date of the Owner's request.

Any measured usage at the Generator Account over and above that required by the Solar Generating Facility itself, will be treated as if it is Common Area Account usage for the purposes of the Annual Solar Energy Credit Allocation and for billing.

For the Residential Unit Accounts, the percentage of solar energy credits (in kWh) allocated to each Residential Unit Account will be in proportion to the relative size of each unit, consistent with the manner in which affordable housing rents are established. This solar allocation percentage will be established initially by the Owner on Appendix A of the NEMVNMA application and interconnection agreement as described in Special Condition 3.

If there are multiple Common Area Accounts, the Owner must specify each Common Area Account allocation on Appendix A of the NEMVNMA application and interconnection agreement as described in Special Condition 3.

Once allocated, Credits (in dollars) will be calculated per the OAS for each Customer Load Account as described in Special Condition 2.c.

(Continued)





**ELECTRIC SCHEDULE NEMVNMA**  
 VIRTUAL NET ENERGY METERING FOR MULTIFAMILY  
 AFFORDABLE HOUSING (MASH/NSHP) WITH SOLAR GENERATOR(S)

Sheet 6

SPECIAL  
 CONDITIONS:  
 (Cont'd.)

2. BILLING (Cont'd.):

c. Monthly Energy Charge/Credit For an OAS with Baseline Rates

A Customer is a net consumer if the Customer Load Account(s) Solar Energy Allocation percentage (SA%) times the solar generator(s)' output (in kWh) is less than the Customer's usage (Customer usage), and its net consumption in kWh is equal to:

$$\text{Customer usage} - (\text{SA}\% \times \text{solar generator(s)' output}) = \text{net consumption}$$

Otherwise the Customer Load Account is a net producer and its net production in kWh is equal to:

$$(\text{SA}\% \times \text{solar generator(s)' output}) - \text{Customer usage} = \text{net production}$$

If the Customer is a net consumer, the Customer Load Account will be billed for its net consumption in accordance with the Customer Load Account's OAS.

If the Customer is a net generator, the net production shall be valued at the rate for the kWh up to the baseline quantity, with any excess kWh generated, valued at the rate for the appropriate tier level in which the equivalent kWh of usage would fall in accordance with the Customer Load Account's OAS.

(Continued)



**ELECTRIC SCHEDULE NEMVNMA**  
 VIRTUAL NET ENERGY METERING FOR MULTIFAMILY  
 AFFORDABLE HOUSING (MASH/NSHP) WITH SOLAR GENERATOR(S)

Sheet 7

SPECIAL  
 CONDITIONS:  
 (Cont'd.)

2. BILLING (Cont'd.):

d. Monthly Energy Charge/Credit For an OAS with Time of Use (TOU)

A Customer is a net consumer for a discrete TOU period if the Customer Load Account's Solar Energy Allocation Percentage (SA%) times the solar generator output (in kWh) for that TOU period (TOU solar generator output) is less than the Customer's usage (Customer TOU usage) for the TOU period, and its net consumption in kWh is equal to

$$\text{Customer TOU usage} - (\text{SA\%} \times \text{TOU solar generator output}) = \text{net consumption}$$

Otherwise the Customer is a net producer and its net production in kWh is equal to:

$$(\text{SA\%} \times \text{TOU solar generator output}) - \text{Customer TOU usage} = \text{net production}$$

Any net consumption or net production shall be valued monthly as follows:

If the Customer is a net consumer during any discrete TOU period, the net consumption shall be billed in accordance with that same TOU period in the Customer Load Account's OAS.

If the Customer is a net generator during any discrete TOU period, the net production shall be valued at the price per kWh at the same TOU period in the Customer Load Account's OAS.

In the event that at the end of the monthly billing cycle, a Customer's net consumption (kWh) for all TOU periods totals zero (i.e. net production in one or more periods exactly offsets the net consumption in all other periods), then the value of usage and/or generation will be calculated using Tier 1 rates (as set forth in the OAS).

e. For an OAS with monthly Minimum Charges

For Customer Load Accounts taking service on a residential OAS, the minimum charges have a customer-related component and an energy-related component. The applicable customer-related components of such minimum charges shall be treated as described in the OAS and billed monthly. The energy (kWh) related component shall be treated in the same manner as energy (kWh) consumed, as described in Special Condition g below, unless otherwise provided for in the Customer Load Account's OAS.

For all residential and Small Customer Load Accounts, the net balance of all moneys owed for the net energy (kWh) consumed must be paid on each monthly billing cycle, unless the customer opts to pay annually. (Customer Load Accounts other than those on residential and Small Commercial must pay monthly.) When Customer Load Accounts are a net electricity producer over a monthly billing cycle, the value of any excess kWh generated during the billing cycle shall be carried over to the following billing period and appear as a credit on the Customer's account, until the end of the Relevant Period.

(Continued)



**ELECTRIC SCHEDULE NEMVNMA**  
 VIRTUAL NET ENERGY METERING FOR MULTIFAMILY  
 AFFORDABLE HOUSING (MASH/NSHP) WITH SOLAR GENERATOR(S)

Sheet 8

SPECIAL  
 CONDITIONS:  
 (Cont'd.)

2. BILLING (Cont'd.):

f. Relevant Period

A Relevant Period consists of any twelve monthly billing cycles commencing on the date PG&E provides the Owner with PG&E's written approval to begin parallel operation of the Solar Generating Facility for purposes of participating in NEMVNMA, and on every subsequent anniversary thereof.

If a Customer Load Account terminates service with PG&E or there is a change of party at a Customer Load Account, prior to the end of any 12 monthly billing cycles, the Relevant Period for that Customer Load Account will consist of that period from the anniversary date until the effective date of that termination or Change of Party.

The subsequent customer after a Change of Party at a Customer Load Account will start a new Relevant Period commencing on the date the new Customer takes service under this rate, and every subsequent anniversary thereafter.

On a going forward basis, the Owner may elect to reallocate the Annual Solar Energy Credit Allocation assigned to a Residential Unit Account that is no longer able to be occupied. In order to elect this option, the Owner must submit adequate evidence to PG&E, at PG&E's sole discretion, to substantiate the unit's uninhabitable status. In order to initiate a reallocation if no new customer takes service in the Residential Unit, the Owner must submit a revised Appendix A described in Special Condition 3. A reallocation of the solar energy credit becomes effective for each Customer Load Account on the first day of the next Billing Cycle where the Billing Cycle start date occurs at least five business days after the date of the Owner's request. The Owner must leave this reallocation in place for at least 12 months. This will result in a reallocation only to the Residential Unit Accounts as provided for in Special Condition 2 b, except the unoccupied unit will not be included in the calculation. There will be no change to any of the remaining Customer Load Account's existing Relevant Period.

If an Owner terminates service under this rate schedule for the Eligible Low Income Facility prior to the end of any 12 monthly billing cycle, then the Relevant Period for all Load Accounts will end as described in the previous paragraph upon reaching the effective date of the service termination.

If there is a Change of Owner for an Eligible Low Income Facility prior to the end of any 12 monthly billing cycle, the Relevant period for the Owner's Load Accounts will end. The new Owner's Load Accounts will automatically be placed in service under this rate schedule and begin a new Relevant Period. However, existing Residential Units will not begin a new Relevant Period.

(Continued)



**ELECTRIC SCHEDULE NEMVNMA**  
 VIRTUAL NET ENERGY METERING FOR MULTIFAMILY  
 AFFORDABLE HOUSING (MASH/NSHP) WITH SOLAR GENERATOR(S)

Sheet 9

SPECIAL  
 CONDITIONS:  
 (Cont'd.)

2. BILLING (Cont'd.):

g. Relevant Period True Up

A true up is performed by PG&E at the end of each Relevant Period for each Customer Load Account.

Where the residential minimum bill applies at the true up for a Bundled Service Customer Load Account, no further amounts will be billed to that Customer as a result of the true up.

In the event the Customer Load Account's allocation of energy (kWh) generated at the associated Generator Account and fed back to the electric grid exceeds the energy (kWh) consumed at the Customer Load Account during the Relevant Period, based on its OAS as set forth in 2.i below, no payment shall be made for the excess energy (kWh) delivered to PG&E's grid. If a Customer Load Account's Relevant Period ends under any of the circumstances described in 2.f above:

- a) The Customer will pay all charges owed at that time;
- b) No payments shall be made for credits remaining after the true-up;

h. Billing Information

PG&E shall provide each Customer Load Account with its net energy (kWh) consumption information with each regular bill. That information shall include the current monetary balance owed PG&E for the net energy (kWh) consumed since the start of the current Relevant Period.

i. OAS Payment Option

Eligible Small Customer (as defined in Rule 1) Customer Load Accounts will be required to pay monthly, unless they specifically request to pay annually, for the net energy (kWh) consumed. For commercial Common Area Accounts other than Small Commercial, the net balance of all moneys owed must be paid on each monthly billing cycle. When the customer is a net electricity producer over a monthly billing cycle, the value of any excess kilowatt-hours generated during the billing cycle shall be carried over to the following billing period and appear as a credit on the customer's account, until the end of the Relevant Period.

(Continued)



**ELECTRIC SCHEDULE NEMVNMA**  
 VIRTUAL NET ENERGY METERING FOR MULTIFAMILY  
 AFFORDABLE HOUSING (MASH/NSHP) WITH SOLAR GENERATOR(S)

Sheet 10

SPECIAL  
 CONDITIONS:  
 (Cont'd.)

3. INTERCONNECTION:

In order to receive approval for Parallel Operation of the Solar Generating Facility, the Owner must submit a completed PG&E application form and interconnection agreement as follows:

Rate Option	Application	Interconnection Agreement
NEMVNMAG	<i>Virtual Net Energy Metering Application and Interconnection Agreement for the Building Owner of Multifamily Affordable Housing with a Solar Generating Facility of 1 megawatt or less. (Form 79-1109).</i>	
	<i>Appendix A – Designation of Multifamily Common Area Accounts, Residential Units and Their Respective Solar Energy Credit Allocation</i>	
NEMVNMAG	<i>No forms required</i>	
NEMVNMAR	<i>No forms required</i>	

(N)



**VIRTUAL NET ENERGY METERING APPLICATION AND  
INTERCONNECTION AGREEMENT**  
FOR THE BUILDING OWNER OF MULTIFAMILY AFFORDABLE HOUSING  
WITH A SOLAR GENERATING FACILITY OF 1 MEGAWATT OR LESS

Sheet 1 (N)  
(N)  
(N)

**Form 79-1109**

**Please Refer to the Attached  
Sample Form**

Advice Letter No: 3422-E-A  
Decision No.

Issued by  
**Brian K. Cherry**  
Vice President  
Regulatory Relations

Date Filed April 10, 2009  
Effective June 8, 2009  
Resolution No. \_\_\_\_\_



Virtual Net Energy Metering Application and Interconnection Agreement for the Building Owner of Multifamily Affordable Housing with a Solar Generating Facility of 1 Megawatt or Less



Please note that this agreement does not constitute an application for rebate and/or incentive programs. For more information on these programs and their specific applications, please contact PG&E by phone, or by email using the subject "solar energy" at smarter-energy@pge.com, 1-800-933-9555 (residential) or BusinessCustomerHelp@pge.com, 1-800-468-4743 (commercial/industrial). For more information on the Multifamily Affordable Solar Housing (MASH) or the New Solar Homes Partnership (NSHP) for affordable housing, please go to www.pge.com/csi where you will find information about the program, including the program handbook, reservation request forms with the program contract as well as a list of requirements, FAQ's and resources. For additional questions about the California Solar Initiative (CSI), MASH or the NSHP, contact PG&E at solar@pge.com.

Project Identification Number \_\_\_\_\_(for PG&E's use only)

If you are applying for a CSI rebate, please check the appropriate box below and continue with this application

- I am also applying for a MASH rebate, and understand that I will have to apply for MASH rebates separately.
I am also applying for a NSHP rebate, and understand that I will have to apply for the NSHP rebates separately.

Part I – Identifying the Generating Facility's Location and Responsible Parties

A. Applicability and Purpose:

This VIRTUAL NET ENERGY METERING APPLICATION AND INTERCONNECTION AGREEMENT FOR THE BUILDING OWNER OF MULTIFAMILY AFFORDABLE HOUSING WITH A SOLAR GENERATING FACILITY OF 1 MEGAWATT OR LESS ("Agreement") applies to electric rate schedule NEMVNMA, Virtual Net Energy Metering Service for Multifamily Affordable Solar Housing for the Owner or designated agent of the Owner ("Owner") who interconnects a solar electric Generating Facility with an capacity of 1 megawatt (1,000 kW) or less that is located on Owner's existing buildings that received incentives under PG&E's California Solar Initiative (CSI) Multifamily Affordable Solar Housing (MASH) Program or on the Owner's new, "Affordable Housing" as defined in Public Resource Code section 25401.6\*\* that received incentives under the New Solar Homes Partnership (NSHP) Program in PG&E's service territory, and that operates in parallel with Pacific Gas and Electric Company's ("PG&E") Distribution System.

The purpose of this Agreement is to allow Owner to interconnect a solar electric generating facility with PG&E's Distribution System, subject to the provisions of this Agreement and PG&E's rate schedule NEMVNMA. Owner has elected to interconnect and operate its solar electric Generating Facility in parallel with PG&E's Distribution System, primarily to offset part or all of the Owner's Multifamily Affordable Solar Housing's own electrical requirements at the affiliated service points as listed in Appendix A. Owner shall comply at all times with this Agreement as well as with all applicable laws, tariffs and applicable requirements of the Public Utilities Commission of the State of California.

B. Description of Service (This Agreement is being filed for, check all that apply):

- A New NEMVNMA Generating Facility interconnection (at an existing service)
For Physical Changes to an interconnected NEMVNMA Generating Facility with previous approval by PG&E (adding PV panels, changing inverters, or changing load and/or operations).
A New NEMVNMA interconnection in conjunction with a new service. An Application for Service must be completed. Additional fees may be required if a service or line extension is required (in accordance with PG&E Electric Rules 15 and 16). Please contact PG&E at 1-800-PGE-5000 (or 1-800-743-5000).
A Reallocation of Solar Energy Generation Credits for an Existing NEMVNMA Facility (see Appendix A). For a reallocation, Owner only needs to fill out Part I, sign Part IV, and complete Appendix A with the reallocation for the NEMVNMA accounts.

**C. Owner's Generating Facility Information - Where will the Generating Facility be installed?**

Name shown on Owner's PG&E service account  
(Must Match Owner's Name on PG&E Energy Bill)

Street Address

City

State

Zip

Mailing Address

City

State

Zip

Business Phone

Home Phone

Fax

Email

**D. Contractor Information (Must be completed even if Contractor will not serve as a PG&E contact).**

Contractor

Company Name

Mailing Address

City

State

Zip

Business Phone

Fax

Email

This contractor is to be used as PG&E contact and is authorized by Owner to receive confidential Owner information and act on behalf of Owner with respect to this agreement.

**E. Other Contact Information (This information is optional.)**

Contact Person

Company Name

Mailing Address

City

State

Zip

Business Phone

Fax

Email

This contact person is to be used as PG&E contact and is authorized by Owner to receive confidential Owner information and act on behalf of Owner with respect to this agreement.

By checking the boxes above and signing this agreement, Owner authorizes PG&E to release information to the contact(s) named above regarding Owner's usage and billing information, Generating Facility location, size and operational characteristics as requested in the course of this interconnection process. PG&E is granted permission to share information with authorized recipients for a period of **two years** from the date this agreement is received by PG&E. Contact(s) are also authorized to make changes to rates and metering arrangements which may result in charges to Owner. Should Owner wish to select a different authorization period, Owner may utilize the "Authorization to Receive Customer Information or Act on a Customer's Behalf", which may be found at:

[www.pge.com/includes/docs/pdfs/shared/newgenerator/solarwindgenerators/standardenet/customer\\_behalf\\_app.pdf](http://www.pge.com/includes/docs/pdfs/shared/newgenerator/solarwindgenerators/standardenet/customer_behalf_app.pdf)

**Please complete this agreement in its entirety**

Page 2 of 10  
Form 79-1109  
Advice 3422-E-A  
April 2009



In addition, Owner authorizes PG&E to release to the California Energy Commission (CEC) information regarding Owner's facility, including Owner's name and Generating Facility location, size, and operational characteristics, as requested from time to time pursuant to the CEC's rules and regulations.

## Part II – Requirements for Interconnection

*In submitting this document, I the Owner, understand and agree to the following terms and conditions:*

### Permission to Interconnect

**Owner must not operate their Generating Facility in parallel with PG&E's Distribution System until they receive written authorization for Parallel Operation from PG&E.** Unauthorized Parallel Operation could result in injury to persons and/or damage to equipment and/or property for which the Owner may be liable.

### Safe Operation of your Generating Facility

Notwithstanding any other provision of this Agreement, if at any time PG&E determines that either (a) the Owner's Facility, or its operation, may endanger PG&E personnel, or (b) the continued operation of the Owner's Facility may endanger the safe and reliable operation of PG&E's electrical system, PG&E shall have the right to disconnect the Facility from PG&E's system. Owner's Facility shall remain disconnected until such time as PG&E is satisfied that the unsafe condition(s) have been corrected.

### Interconnections on PG&E's Secondary Network

Applications to interconnect systems located in San Francisco or Oakland may require additional analysis to determine whether or not their proposed installation is on PG&E's networked secondary system. Networked secondary systems are in place to provide heightened levels of reliability in densely populated areas and may affect the ability of PG&E to interconnect NEMVNMA Owner's solar generating facility. **Please contact Generation Interconnection Services at 415-972-5676 or email [gen@pge.com](mailto:gen@pge.com) if your proposed installation is in San Francisco where the zip code is 94102, 94103, 94104, 94105, 94107, 94108, 94109, 94111 or 94133 or in Oakland and where the zip code is 94607 or 94612.**

### Meter access

Owner's generator output meter and the AC disconnect switch must be installed in a safe, PG&E-accessible location and remain unobstructed by locked gates or pets. Additionally, meter and AC disconnect switch access must be maintained at all times for meter reading and system maintenance. Any animals owned by the Owner or Multifamily residents, including pet dogs, should not have access to these areas to avoid hindering PG&E service personnel, preventing them from completing their work. Customers who currently have generator meters inaccessible from the outside of the building and who choose to place their generator AC disconnect switch near their meter, must place the required generator AC disconnect switch in a location readily accessible to PG&E in order to participate in this program. Should future access problems arise, PG&E reserves the right to terminate service, in accordance with its filed tariffs.

### Document and Fee Requirements

Other Documents and/or Fees *may* be required and there may be requirements for interconnection in addition to the above list, depending on the specifics of the planned Generating Facility. Other approvals and/or other agreements may be needed for special PG&E programs or regulatory agency requirements.

### Stale Agreements

If this agreement is still pending two years from its date of submittal and Owner has not met all of the requirements, PG&E will close this application and Owner will be required to submit a new application should Owner wish to take service on Schedule NEMVNMA.

### A. Agreement Package:

These documents are needed to ensure safe and reliable operation of PG&E's Distribution System and to confirm that Owner's interconnection has been performed in accordance with PG&E's tariffs. (Additional forms are available upon request by telephoning 415-972-5676, emailing [gen@pge.com](mailto:gen@pge.com), or visiting PG&E's website at [www.pge.com/standardnem](http://www.pge.com/standardnem)). **Owners should not delay sending any part of the agreement package to PG&E.** As PG&E receives the documentation described in Sections (1) through (5) below, PG&E will begin to process the application.

**Please complete this agreement in its entirety**

## Required Documents for New Applicants:

1. A completed copy of this **Agreement, including a completed Appendix A**. **Please note:** the Owner's name (as identified in Part I, Section C) must be the same name as on the PG&E bill. In this Agreement, Owner will confirm their otherwise-applicable rate schedule (OAS) for all Common Area accounts in Owner's name as listed in Appendix A – Owners who don't specify an OAS for their Common Area accounts will be defaulted to Rate Schedule E-1, establishing how Owner's Common Area Account's monthly usage or net generation will be charged/credited. Owner's-initiated rate changes are governed in accordance with PG&E's Electric Rule 12.
2. A **single-line diagram** showing Owner's actual installation of his/her Generating Facility. The diagram must include the electrical rating and operating voltages of the significant electrical components such as the service panel, the disconnect switch (if required), inverters, all photovoltaic generators, circuit breakers and other protective devices of the Generating Facility, the general location of the Owner's loads relative to the Generating Facility, and the interconnection with PG&E's Distribution System. The diagram must include the following information:
  - a. A description and location of the visible, lockable **AC disconnect switch**.

PG&E requires an Owner to install an AC disconnect switch to facilitate maintenance of the Owner's equipment (i.e. inverter, PV arrays, etc). The AC disconnect switch provides PG&E the ability to isolate the Owner's generator from the NEMVNMA Eligible Low Income Facility and utility's Distribution System.
  - b. A description of the specific **inverter(s)** used to control the interconnection between PG&E and the Generating Facility, including rating, brand name, and model number. Only CEC-certified inverters<sup>1</sup> will pass the requirements for Simplified Interconnection per PG&E's Electric Rule 21. Non-certified units will require further study and may involve additional costs.
  - c. A complete description of the **generating equipment Owner plans to install**. The description must include the photovoltaic panel manufacturer name, model number, number of panels, and the nameplate rating. As with the inverters, only CEC-certified will pass the requirements for Simplified Interconnection. (See the PG&E website [www.pge.com/gen](http://www.pge.com/gen) or the CEC website in footnote 1 below.)
  - d. A description of how the power output from the inverter is connected to the **main service panel via a branch breaker**. The ampere rating of this branch breaker and the main service panel breaker must be compatible with the output rating of the Generating Facility. The output rating is computed based on the total nameplate rating of the inverter.
  - e. PG&E requires a **generation output meter**. The description must include the meter manufacturer, model number and type (socket or panel), as well as any other relevant information (e.g., socket, panels, breakers, etc.). If instrument transformers are required, the description should include this information.
3. **Site Diagram** – The site diagram must show the building or buildings that will be included as part of the Eligible Low Income Housing served through a single Service Delivery Point, the meter locations, and denote where the PV solar generating facility will be located and interconnected.
4. Information regarding any existing **insurance coverage** (liability and/or property) for the Schedule NEMVNMA Generating Facility location –

Owner shall meet all applicable safety and performance standards established by the National Electrical Code, the Institute of Electrical and Electronics Engineers, accredited testing laboratories such as Underwriters Laboratories and, where applicable, rules of the California Public Utilities Commission regarding safety and reliability. An Owner with a solar electric Generating Facility that meets those standards and rules shall not be required to install additional controls, perform or pay for additional tests, or purchase additional liability insurance.

To the extent that Owner has currently in force property insurance and commercial general liability or personal liability insurance, Owner agrees that it will maintain such insurance in force for the duration of this Agreement in no less amounts than those currently in effect. Pacific Gas and Electric Company shall have the right to inspect or obtain a copy of the original policy or policies of insurance prior to commencing operation. As long as Owner meets the requirements of this section, Owner shall not be required to purchase any additional liability insurance.

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<sup>1</sup> The CEC's eligible equipment list can be found under the CSI heading at: [www.consumerenergycenter.org/erprebate/equipment.html](http://www.consumerenergycenter.org/erprebate/equipment.html)

I have insurance. I hereby certify that there is presently insurance coverage in the amount of \$ \_\_\_\_\_ for the Schedule NEMVNMA Generating Facility location.

Insuring Company's Name: \_\_\_\_\_

Insurance Policy # \_\_\_\_\_

I **do not** have insurance. I hereby certify that there is presently \$0 (zero) dollars of insurance for the Schedule NEMVNMA Generating Facility location

5. A copy of the **final, signed, jurisdictional approval (building permit) for Owner's Generating Facility** from the local government entity with jurisdiction over the Owner's project. **Owner's agreement package will not be complete until PG&E receives this document.**

### B. Internet Agreement Forms

If this Agreement has been completed electronically, it may be submitted to PG&E via e-mail or U.S. mail. Copies or forms requiring a signature, attachments or any applicable fees described in Part II must be mailed to PG&E at the address noted in Section IV (E), Notices.

## Part III – General Facility

A. Expected **date** of Project Completion and PG&E Receipt of Final, Signed-Off Building Permit for Generating Facility?

Date: \_\_\_\_\_

B. Are there any other generators interconnected on this account?

Yes

**If yes**, specify what kind of generator \_\_\_\_\_

No

C. Are there any possible generator meter access issues?

Yes **If yes**, check all that apply:

Locked Room/Gate

Meter located inside of facility/residence

Unrestrained animal at meter or AC disconnect switch location

Other (Please explain) \_\_\_\_\_

No

D. Are any of your accounts on a Demand Response program?

Yes

**If yes**, what program are you on? \_\_\_\_\_

No.

(For more information on PG&E's demand response programs see: [www.pge.com/demandresponse](http://www.pge.com/demandresponse) )

**Please complete this agreement in its entirety**

**A. AC Disconnect Switch** (see Part II, Section A.2.a above for policy on disconnect switches)

List the AC disconnect switch that will be used at this Generating Facility.

Disconnect Switch Manufacturer	Disconnect Switch Model Number	Disconnect Switch Rating (amps)

**B. Inverters interconnected with PG&E**

List all the inverters that will be interconnected to PG&amp;E.

**Owners with non-standard inverters** which do not meet the UL and IEEE requirements specified in Electric Rule 21, or Owners whose aggregate Generating Facility capacity exceeds 15% of the peak load on the distribution line section as described in Electric Rule 21 (Section I.6.) require a **Supplemental Review** which may entail a study, additional equipment, and/or other requirements.

No.	Inverter Manufacturer	Inverter Model Number	Inverter Nameplate Rating <sup>2</sup> kW (per unit)	Quantity of Inverters	Inverter Output Voltage	Single or Three phase?
1						
2						

**C. Photovoltaic Generator Equipment**

List the photovoltaic (PV) panel information requested below. If the panels are not all identical modules, list the total capacity connected to each inverter you listed above. (Please attach additional sheets if more space is needed.)

No.	PV Panel Manufacturer	PV Panel Model	PV Panel CEC Rating kW (per unit)	Quantity of PV Panels	Total Capacity <sup>3</sup> (kW)	Inverter number from (B.) above (1 or 2)
1						
2						

**D. Service Panel Short Circuit Interrupting Rating**

For systems larger than 10 kW, what is the short circuit interrupting rating (SCIR) rating of the service panel connected to this generating facility? \_\_\_\_\_

**E. Notices - Mailing Instructions and Assistance:**

When this agreement has been completed it should be mailed, along with the required attachments and any applicable fees, to:

PG&E'S P.O. BOX ADDRESS	PG&E'S STREET ADDRESS
Pacific Gas and Electric Company Attention: Generation Interconnection Services Mail Code N7L P.O. Box 770000 San Francisco, California <b>94177</b>	Pacific Gas and Electric Company Attention: Generation Interconnection Services Mail Code N7L 245 Market St. San Francisco, California <b>94105</b>

Phone calls and questions may be directed to the Generation Interconnection Services' hotline at: 415-972-5676 or an electronic application may be submitted to [gen@pge.com](mailto:gen@pge.com)

<sup>2</sup> The inverter rating equals the nameplate rating, in kW. If there is more than one inverter of one type being installed, the inverter rating equals the nameplate rating of one unit of the model being installed.

<sup>3</sup> The total capacity is the PV panel rating times the quantity.

**Please complete this agreement in its entirety**

**F. Governing Law**

This Agreement shall be interpreted, governed, and construed under the laws of the State of California as if executed and to be performed wholly within the State of California.

**G. Term Of Agreement**

After receipt of all applicable fees, required documents, and this completed Agreement, this Agreement shall become effective on the date of PG&E issues the permission to operate letter. This Agreement shall continue in full force and effect until terminated by either Party providing 30-days prior written notice to the other Party, or when a new Owner takes service with PG&E operating this approved generating facility. This new Owner will be interconnected subject to the terms and conditions as set forth in Schedule NEMVNMA.

**H. Governing Authority**

This contract shall at all times be subject to such changes or modification by the Public Utilities Commission of the State of California as said Commission may, from time to time, direct in the exercise of its jurisdiction.

**I. Appendix A**

Attached to this agreement is *Appendix A - Designation of Multifamily Common Area Accounts, Residential Units and their respective Solar Credit Allocation*

Owner Name (Please Print): \_\_\_\_\_

(Signature): \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_

A copy of this signed agreement should be retained with the "Permission to Operate" letter to confirm project approval.

## Appendix A – Designation of Multifamily Common Area Accounts, Residential Units and their respective Solar Energy Credit Allocation

Project Identification Number \_\_\_\_\_ (for PG&E's use only)

### Section 1 Instructions

- 1) Complete the section below (this information must match the Owner information on the associated *Virtual Net Energy Metering Application and Interconnection Agreement for the Building Owner of Multifamily Affordable Housing with a Solar Generating Facility of 1 Megawatt or Less* for the same NEMVNMA Eligible Low Income Facility.

Owner Name	Address	Date

- 2) Is this application for a new NEMVNMA Eligible Low Income Facility or a reallocation for an existing NEMVNMA facility? (Existing NEMVNMA facility Owners may not reallocate the Solar Allocation Percentages for all Common Area Accounts and all Residential Unit Accounts for a period of 5 years after first being interconnected on NEMVNMA, even if there is a change in Owner. However, after 5 years a reallocation may be requested. Also, a reallocation of credits between the different Common Area Accounts is allowed, and similarly if a residential unit becomes uninhabitable under the terms described in the NEMVNMA tariff in Special Condition 2 g, the Owner may choose to reallocate credits to the other Residential Unit Accounts.)

This application is for an allocation for the initial New NEMVNMA Eligible Low Income Facility:

This application is for a reallocation for an existing NEMVNMA Eligible Low Income Facility:

- 3) For a new NEMVNMA Eligible Low Income Facility, if you applied for the Multifamily Affordable Solar Housing Program (MASH), please enter the percentages in the space provided below from the MASH application.

Solar Allocation Percentage for All Common Area Account(s) Listed in the MASH Incentive Application (only required if applying for MASH Track 1a incentives):	Solar Allocation Percentage for All Residential Unit Accounts Listed in MASH Incentive Application (only required if applying for MASH Track 1b incentives):	Both Percentages Must Total 100%
%	%	= 100 %

- 4) Please use the attached Appendix A Section 2 page to list all accounts that are located in the Eligible Low Income Facility that will be taking service on NEMVNMA. Include the Generator Account, all Common Area Accounts (if any) and all Residential Unit Accounts. The Common Area and Residential Unit Accounts must be associated with the same Generator Account and all must be interconnected via the same Service Delivery Point, as defined in PG&E's Electric Rule 16, to be Eligible for Schedule NEMVNMA.

Please note for each row:

- **Account Type** - check the one box corresponding to the type of account (that is, Common Area, Residential Unit or Generator Account). There should be only one Generator Account listed. Every row (account) should have one and only one of these 3 boxes checked. *(Required)*
- **Account Address** - Provide an address, including unit number, for all Accounts (for the Generator Account you may use the address of the nearest Common Area Account). *(Required)*
- **Name** - For Common Area Accounts and the Generator Account, the Owner's name must be entered. For Residential Unit Accounts, enter the name of the occupant, if it is known.

**Please complete this agreement in its entirety**

- **PG&E Account Number** - Enter the PG&E Account number on all Common Area Accounts and Generator Accounts (Required)
- **Otherwise Applicable Rate Schedule** – Enter the PG&E Otherwise Applicable Rate Schedule (OAS) for all Common Area Accounts and desired Generator Accounts (Required).
- **Solar Allocation Percentage** – For each Common Area Account and Residential Unit Account listed (but not the Generator Account), enter the Solar Allocation Percentage to two decimal places. The Solar Energy Allocation Percentage for each Residential Unit Account must be in proportion to the relative size of each unit, consistent with the manner in which affordable housing rents are established. The total of all Solar Energy Allocation Percentages must equal 100%.
- **Appendix A, Section 2 Page Numbers** – In the space provided on the bottom of each page, please mark the page number and total number of pages for your Appendix A, Section 2 Account List. (Start with Page 1 and do not count the page numbers for these two instruction pages.)

5) If the Eligible Low Income Facility has been on the MASH program for less than 5 years, verify that: (for all pages included)

Total of Solar Allocation Percentages for all the Common Area Accounts (if any) \_\_\_\_\_

Total of Solar Allocation Percentage for all the Residential Unit Accounts \_\_\_\_\_

These numbers must match the percentages provided in number 3 above (if receiving MASH incentives), from Line 2, and must add up to 100%.

**Section 2**

#	Account Type Check only one box for each row (required field)			Account Address (required field)  (for Generator Account use address of nearest common area account)	For Residential Units, Last Name of Occupant, if known  For Common Area and Generator Accounts, Owner's Name (Name on PG&E Account)	(Required field for Common Area Accounts and Generator Account only)  PG&E Account Number	(Required field for Common Area Accounts and Generator Account only)  Otherwise Applicable Rate Schedule (OAS) under NEMVNMA	(Required Field for Common Area Accounts and Residential Accounts)  Solar Energy Allocation Percentage
	Common Area	Residential Unit	Generator Account (only 1)					
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
13	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
17	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
Total Solar Energy Allocation Percentage for this page								

Project Identification Number \_\_\_\_\_ (for PG&E's use only)

Account List - Appendix A Section 2 Page \_\_\_\_\_ of \_\_\_\_\_

**Please complete this agreement in its entirety**





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**PG&E Gas and Electric  
Advice Filing List  
General Order 96-B, Section IV**

Aglet	Department of the Army	Northern California Power Association
Agnews Developmental Center	Dept of General Services	Occidental Energy Marketing, Inc.
Alcantar & Kahl	Division of Business Advisory Services	OnGrid Solar
Ancillary Services Coalition	Douglas & Liddell	PPL EnergyPlus, LLC
Anderson & Poole	Douglass & Liddell	Pinnacle CNG Company
Arizona Public Service Company	Downey & Brand	Praxair
BART	Duke Energy	R. W. Beck & Associates
BP Energy Company	Duncan, Virgil E.	RCS, Inc.
Barkovich & Yap, Inc.	Dutcher, John	RMC Lonestar
Bartle Wells Associates	Ellison Schneider & Harris LLP	Recon Research
Blue Ridge Gas	Energy Management Services, LLC	SCD Energy Solutions
Braun & Associates	FPL Energy Project Management, Inc.	SCE
C & H Sugar Co.	Foster Farms	SESCO
CA Bldg Industry Association	Foster, Wheeler, Martinez	SMUD
CAISO	Franciscan Mobilehome	SPURR
CLECA Law Office	G. A. Krause & Assoc.	Santa Fe Jets
CSC Energy Services	GLJ Publications	Seattle City Light
	Goodin, MacBride, Squeri, Schlotz & Ritchie	Sempra Utilities
California Cotton Ginners & Growers Assn	Green Power Institute	Sequoia Union HS Dist
California Energy Commission	Hanna & Morton	Sierra Pacific Power Company
California League of Food Processors	Heeg, Peggy A.	Silicon Valley Power
California Public Utilities Commission	Hitachi	Smurfit Stone Container Corp
Calpine	Hogan Manufacturing, Inc.	Southern California Edison Company
Cameron McKenna	Imperial Irrigation District	St. Paul Assoc.
Cardinal Cogen	Innercite	Sunshine Design
Casner, Steve	International Power Technology	Sutherland, Asbill & Brennan
Cerox	Intestate Gas Services, Inc.	TFS Energy
Chamberlain, Eric	J. R. Wood, Inc.	Tabors Caramanis & Associates
Chevron Company	JTM, Inc.	Tecogen, Inc.
Chris, King	Los Angeles Dept of Water & Power	Tiger Natural Gas, Inc.
City of Glendale	Luce, Forward, Hamilton & Scripps LLP	Tioga Energy
City of Palo Alto	MBMC, Inc.	TransCanada
City of San Jose	MRW & Associates	Turlock Irrigation District
Clean Energy Fuels	Manatt Phelps Phillips	U S Borax, Inc.
Coast Economic Consulting	Matthew V. Brady & Associates	United Cogen
Commerce Energy	McKenzie & Associates	Utility Cost Management
Commercial Energy	Meek, Daniel W.	Utility Resource Network
Constellation	Merced Irrigation District	Utility Specialists
Constellation New Energy	Mirant	Vandenberg Air Force
Consumer Federation of California	Modesto Irrigation District	Verizon
Crossborder Energy	Morgan Stanley	Wellhead Electric Company
Davis Wright Tremaine LLP	Morrison & Foerster	Western Manufactured Housing Communities Association (WMA)
		White & Case
Day Carter Murphy	New United Motor Mfg., Inc.	eMeter Corporation
Defense Energy Support Center	Norris & Wong Associates	
Department of Water Resources	North Coast SolarResources	