

**Brian K. Cherry**Vice President
Regulation and Rates

Pacific Gas and Electric Company 77 Beale St., Mail Code B10C P.O. Box 770000 San Francisco, CA 94177

Fax: 415.973.6520

May 4, 2012

#### Advice 3902-E-C

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

# **Subject:** Supplemental: Schedule NEMV Pursuant to Resolution E-4481

Pacific Gas and Electric Company (PG&E) hereby submits modifications to its proposed new Schedule NEMV from AL 3902-E-B and the associated forms. The affected tariff sheets are listed on the enclosed Attachment I.

## **Purpose**

The purpose of this Advice Letter is to modify the proposed new Schedule NEMV pursuant to Resolution E-4481. This advice letter replaces Advice Letter (AL) 3902-E-B (which merged AL 3902-E, 3902-E-A<sup>1</sup>).

## **Background**

On September 12, 2011, pursuant to Decision (D.) 11-07-031,<sup>2</sup> Ordering Paragraph (OP) 2, PG&E submitted AL 3902-E for a new Electric Schedule NEMV—*Virtual Net Energy Metering For A Multi-Tenant Or Multi-Meter Property Served At The Same Service Delivery Point* and two accompanying new forms:

- NEMV Application and Interconnection Agreement for a Solar (PV) and Wind Facility of 1 Megawatt or Less (Form 79-1131); and,
- NEMV Interconnection Application for a NEMV0020Renewable Electrical Generation Facility of 1 Megawatt or Less (Form 79-1142)

Additionally PG&E modifies the form: Interconnection Agreement for Net Energy Metering For a Renewable Electrical Generation Facility of 1,000 Kilowatts or Less (Form 79-1137).

http://www.pge.com/nots/rates/tariffs/tm2/pdf/ELEC\_3902-E.pdf http://www.pge.com/nots/rates/tariffs/tm2/pdf/ELEC\_3902-E-A.pdf http://www.pge.com/nots/rates/tariffs/tm2/pdf/ELEC\_3902-E-B.pdf

<sup>&</sup>lt;sup>2</sup> http://docs.cpuc.ca.gov/PUBLISHED/FINAL\_DECISION/139683.htm

PG&E submitted Supplemental AL 3902-E-A on October 4, 2011 in order to address an initial concern of Energy Division staff ("Staff"). Staff had asked PG&E to submit a Supplemental Advice Letter to correct a typographical error and remove a sunset date in Schedule NEMV AL 3902-E. PG&E willingly made these changes.

On December 20, 2011, PG&E submitted a second supplemental advice letter, AL 3902-E-B to clarify and correct Schedule NEMV. The clarification was made in Special Condition 3(f) *Relevant Period*, paragraph 4, third sentence to make the language consistent with Special Condition 2 on fees. The second change corrected the definition of Net Surplus Electricity as it applies to a NEMV Benefiting Account in Special Condition 5. AL 3902-B merged all changes from the prior two Advice Letters 3902-E and 3902-E-A<sup>3</sup>.

The Commission issued Draft Resolution E-4481 on February 8, 2012, and comments and reply comments were submitted by PG&E and various parties. At its April 19<sup>th</sup>, 2012 regular meeting, the Commission approved Resolution E-4481 ordering modifications to NEMV and its associated forms in addition to those contained in the Draft Resolution. This Advice letter submits the attached conforming NEMV tariff sheets within 10 days in accordance with OP 1 of E-4481 from the date PG&E received a copy of the final resolution<sup>4</sup>.

# **Tariff Revisions**

In summary, the changes ordered are:

- 1. (OP 2)<sup>5</sup> a) **Delete Site Assessment Fee** PG&E's site assessment fee of \$550 originally proposed in Special Condition 2 is deleted from its NEMV tariff.
  - b) **Modify Application to Collect Site Info** PG&E's NEMV application forms (79-1131 and 79-1142) Section III E are modified to collect the necessary technical details from NEMV interconnection applications. PG&E also adds a new Appendix C cover sheet to which PG&E will attach a current copy of the PG&E Standards and Requirements for Virtual Net Metering that PG&E requires applicant to meet in order to avoid a site assessment by PG&E.
  - c) **Essential Site Assessment** PG&E added a note in Special Condition 2 of the NEMV tariff and the NEMV application forms (79-1131 and 79-1142) in Section III E stating that if after review of a customer's NEMV application, PG&E determines a site assessment is essential, PG&E may conduct on-site NEMV site assessments

<sup>3</sup> At the direction of Staff, Advice Letter 3902-E-A, on Sheet 2 in the third line, corrected a typographical error and removed the fragment "until December 31, 2015, or until all funds available for the incentives have been allocated, whichever comes first,"

<sup>5</sup> OP 1 set filing date.

<sup>&</sup>lt;sup>4</sup> PG&E received an email from Energy Division entitled "Web-Published Resolution E-4481 VNM" dated Tue 4/24/2012 12:58 PM, which contained the final resolution.

for "complex service configurations." PG&E will track the expenses associated with such site assessments for future recovery as provided in OP 2.

- 2. (OP 3) a) Set-up Fee PG&E is permitted to charge to the Generating Account a one-time set-up fee for each NEMV arrangement (defined as a Generating Account providing credits for one or multiple Benefiting Accounts). The fee must be less than \$25 per Benefiting Account. Special Condition 2 of the proposed NEMV tariff already included a \$12 set-up fee per benefiting account to be billed to the owner, so no change is needed to accommodate this requirement.
  - b) **Set-up Fee Cap** –Set-up fees are capped at \$500 per NEMV arrangement.
- 3. (OP 5)<sup>6</sup> a) **Account Modifications** PG&E modified Special Condition 2 of the NEMV tariff to allow an Owner<sup>7</sup> to make account modifications as frequently as needed. Special Condition 3(g) lists the notification requirements.
  - b) Special Condition 2 now notes that PG&E will not charge for up to one change per Benefiting Account per 12 month period; and
  - c) Special Condition 2 and 3(g) note that Subsequent changes per 12 month period may be charged at up to \$7.50 per account change, billed to the Generating Account; PG&E will apply its proposed \$3 per Benefiting Account modification fee in this situation.
- 4. (OP 6) Disposition of Unallocated Credit PG&E modified its credit allocation sheets (Appendix A of forms 79-1131 and 79-1142) to provide the "system operator/qualified customer" the option to designate the disposition of unallocated credits to either: the Common Area Account, or one Benefiting Account. The NEMV tariff also has additional language in Special Condition 3(g) to explain this option, and defines the designated account as the "Default Account".
- 5. (OP 7) **Definition of Qualified Customer** PG&E incorporated in its NEMV Applicability section the definition of a "Qualified Customer" as follows:

"Qualified Customer: A Qualified Customer is either:

- (i) the Owner or Operator of the multi-tenant, multi-meter Property with one or more separately metered accounts;
- (ii) an entity authorized by the owner to install and/or operate the generating facility and who will be the IOU's customer of record for the Generating Facility; or

<sup>6</sup> OP4 relates to monthly billing fees. PG&E did not originally include such a fee (only SDG&E did, according to the resolution), so no change is needed.

<sup>&</sup>lt;sup>7</sup> The NEMV tariff defines the Owner as the generator owner or their designee who serves as the Customer of record.

(iii) a tenant/occupant of the Property with a separately metered account, which is physically connected to the same SDP to which the Eligible Generator is connected."

Additionally, where appropriate, PG&E changed the term "Customer" to "Qualified Customer" at numerous points throughout the NEMV tariff.

- 6. a) (OP 9)<sup>8</sup> **Demand Response Eligibility** PG&E removed the language in Applicability section b (iv) restricting benefitting accounts from being on demand response programs. Farther in the Applicability section, PG&E added a paragraph to clarify that NEMV customers are eligible for the same demand response programs and solar tariffs as NEM customers.
  - b) (OP 10) **Basis for Demand Response Charges** In the same paragraph referenced in 6. a) above, PG&E modified the Applicability section of NEMV to require that demand response payments to NEMV customers be based on the customer's metered usage disregarding any contributions from virtually net-metered generation. Similarly, any other demand response program elements that are affected by a customer's load (e.g., program eligibility) should also exclude from consideration any impacts of NEMV generation. PG&E has included this provision in the NEMV application and interconnection agreements (Forms 79-1131 and 79-1142).
- 7. (OP11) **Include Multi-tenant and Multi-meter Customers** PG&E modified the NEMV tariff name and Applicability to clarify that schedule NEMV is available to any multi-tenant or multi-meter property, including residential (whether rental property or condominium), commercial and industrial properties.<sup>9</sup>
- 8. a) (OP 12) **NEMV Treated the Same As NEM** PG&E added language to the NEMV Rates Section indicating that for the purposes of calculating all customer charges, standby charges, and demand charges, a NEMV customer should be treated identically to a NEM customer, pursuant to PU Code § 2827(g)
  - b) Allow for Demand Credit PG&E modified NEMV Special Condition 2(a) to collect incremental billing costs from NEMV customers who wishe to receive a demand credit, subject to a review for reasonableness; and Special Condition 3(f) to describe how the demand credit would be calculated. PG&E also modified the metering section to say the Owner must pay for and install an interval meter on the generator account to measure and calculate the net demand.

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<sup>&</sup>lt;sup>8</sup> OP 8 addresses future activity.

<sup>&</sup>lt;sup>9</sup> The language of the resolution talks about "properties" but the definition of Qualified Customer in bullet 5 above uses "Property". PG&E assumes the resolution is talking about the class of customers eligible, where the definition is referring to one specific instance.

- 9. (OP 14<sup>10</sup>) **Include SB 489 Applicability** PG&E modified the NEMV tariff to reflect the expanded technology eligibility set out in SB 489, which became effective on January 1, 2012. This involved:
  - a) modifying the Applicability section of NEMV to reflect the changes made to the approved NEM tariff for SB 489; and
  - b) creating a new interconnection application, Form 79-1142, NEMV Interconnection Application for a Renewable Electrical Generation Facility of 1 Megawatt or Less" for non-PV-solar and/or wind customers, and modifying the existing Form 79-1137 Interconnection Agreement for Net Metering For a Renewable Electrical Generation Facility of 1,000 Kilowatts or Less. These two forms are only for non-PV solar or wind renewable generating accounts. The form filed originally with E-3902-E, 79-1131, "NEMV Application and Interconnection Agreement for a Solar or Wind Generating Facility of 1 Megawatt or Less Serving a Multi-Tenant Or Multi-Meter Property at a Single Service Delivery Point" is not changed for SB 489, as it will be used for solar (photovoltaic or PV) and wind generator as originally filed, which PG&E expects will constitute the preponderance of NEMV applications received.
- 10. (OP 15.) Combining PBI and Generator Output Meters PG&E modified its NEMV tariff, Special Condition 1 on metering to note that an Owner or Operator using a Performance Based Incentive (PBI) meter for California Solar Initiative (CSI) incentives will not be required to install additional Net Generator Output Meters (NGOM) for NEMV for the purposes of paying a CSI incentive. However the PBI meter will need to be a utility-owned and read meter, installed in a location acceptable to PG&E. It must also be an interval meter to meet the requirements for both programs.

It is noted that if a single meter is requested, the Owner and Operator of a PBI system will need to contract separately for Performance Monitoring and Reporting Service (PMRS) as required by the CSI Program.

Also, PG&E noted that Owners not taking PBI incentives under the CSI Program are required to install an NGOM meter

PG&E has included the cost of NGOM meters of various classes in its revised NEMV tariff. The required meters must be "revenue grade."

11. (OP 16) Disconnect/Reconnect - PG&E has included questions in its application forms requiring the Owner, at the time of site assessment, to provide details about their requirements or expectations for a disconnect/reconnect to safely tie in the generator. Many factors cause disconnect/reconnect costs to vary widely. Some of the factors include (i) crew size and type — depending on the characteristics of the existing service arrangement; (ii) the need for off-hours work, overtime; (iii) duration

<sup>&</sup>lt;sup>10</sup> OP 13 applies only to SCE.

(including standby time) (iv) Outage/clearance coordination for other customers; and (v) size of the service. The disconnect/reconnect may be performed by a single troubleman (T-man) or require a 2 or 3-man crew. For example, is the scope primarily opening a switch or does it include more extensive switching and grounding by PG&E and/or "unsplicing" or unbolting to perform the disconnection?

Also, some services performed by PG&E at the same time as Disconnect/Reconnect are beyond the scope of the Disconnect/Reconnect and may incur additional costs by PG&E (for example, assistance in pulling wires through conduits.)

Due to the variability at each location, PG&E in the NEMV tariff includes a typical range of charges from \$0 to \$4,000. Costs in most cases are expected to fall within this range. Depending on the Qualified Customer's responses to the application questions on their disconnect/reconnect "needs," and a possible site review, PG&E will be able to narrow this range for the customer.

- 12.(OP 17) **Service Delivery Point (SDP)** PG&E modified its NEMV tariff to note that Customer-owned line extensions that deliver power to other meters on the same Property are not, for NEMV purposes, considered separate SDPs.
- 13. Not Restricted to Bundled Customers On page 38 of E-4481, the Commission concludes, "There is nothing in D.11-07-031 that limits VNM service to bundled service accounts only. [Community Choice Aggregation] CCA and [Direct Access] (DA) customers are currently eligible for NEM and now VNM...." PG&E removed restrictions limiting NEMV to bundled customers and added language taken from the NEM tariff to Special Condition 3 regarding billing of DA and CCA customers, and in various other places.

PG&E expects to be able to properly bill bundled NEMV customers relatively quickly. However, implementing programming changes to provide NEMV credits to customers who buy their generation from CCA suppliers will take some months to complete. While this work is underway, PG&E is willing to provide a similar benefit consistent with the terms and conditions for CCA Service, in which PG&E will provide any applicable non-generation credits, and the CCA will provide any applicable generation credits under their program. In order to accommodate these customer requests, as an interim measure, PG&E will provide CCA Service customers on NEMV with a customer-satisfaction adjustment until the programming to bill these customers is completed.

- 14. **Single Benefiting Account Arrangements** Also from Page 38 of E-4481, the resolution states:
  - "....The issue of whether master meter accounts are eligible for VNM service is currently in dispute among SDG&E and Everyday Communications Corp. We will not comment on that formal complaint, but instead reiterate the intent of VNM

through the revised definition of "Qualified Customer" found in OP 7 which removes the 'bundled service' language."

That issue has been resolved and a final decision granting San Diego Gas and Electric's request to dismiss the complaint has been granted PG&E has included footnotes in the NEMV Applicability on the term "multi-meter" property that says, "Multi-meter" means two or more utility revenue meters participating in the NEMV program, in addition to the Generator Account meter."

In addition to the tariff and form modifications listed above, the OP's allow for:

- 1. Tracking Site Assessment Expenses, Recovery, and Revisiting Costs Pursuant to OP 2, the resolution allows PG&E track the expenses associated with such on-site NEMV site assessments for the "complex service configurations" and seek recovery in a future rate case. One year from the effective date of resolution E-4481, PG&E may request recovery of NEMV site assessment expenses. After the first year, PG&E may request the Commission address the need for and criteria that would trigger a NEMV site assessment going forward.
- 2. Data for Owner to Verify Proper Crediting OP 8 requires PG&E and the other IOUs to work with Generating Account Owners and initiate discussions with the Joint Solar Parties and the Commission to identify data that can be provided to the Generating Account Owner to enable them to verify that Benefiting Account holders are properly credited. These discussions and subsequent solutions should take into account potential relevant outcomes of the Smart Grid Rulemaking (R.08-12-009). Within six months of the date Resolution E-4481 was issued (by October 25, 2012), the IOUs shall file Advice Letters with proposed solutions to this issue.
- 3. **Modify CSI Handbook on Combined CSI/NGOM Metering** OP 15 requires the CSI Program Administrators to make changes to the CSI Program Handbook to allow combined metering methods.

No specific text is included in the tariffs filed here addressing these three issues.

# **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 **May 24, 2012,** which is 20 days after the date of this filing. Protests should be mailed to:

CPUC Energy Division Tariff Files, Room 4005 DMS Branch

<sup>11</sup> http://docs.cpuc.ca.gov/word\_pdf/FINAL\_DECISION/162971.pdf

505 Van Ness Avenue San Francisco, California 94102

Facsimile: (415) 703-2200

E-mail: EDTariffUnit@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, Regulation and Rates
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-6520 E-mail: PGETariffs@pge.com

# **Effective Date**

PG&E requests that this advice filing become effective on regular notice, **June 4, 2012,** which is the Monday following 30 calendar days after the date of 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 the parties on the service list for R.10-05-004 (*Order Instituting Rulemaking Regarding Policies, Procedures and Rules for the California Solar Initiative, the Self-Generation Incentive Program and Other Distributed Generation Issues*). Address changes to the General Order 96-B service list should be directed to PG&E at email address PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at ProcessOffice@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. Advice letter filings can also be accessed electronically at: http://www.pge.com/tariffs.

Vice President, Regulation and Rates

# Attachments

Paul Phillips – Energy Division Gabe Petlin – Energy Division Amy Reardon – Energy Division Service List R.10-05-004 CC:

# 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 E)			
Utility type:	Contact Person: Greg Backens		
☑ ELC ☐ GAS	Phone #:415-973-4390	Phone #:415-973-4390	
□ PLC □ HEAT □ WATER	E-mail: gab4@pge.com		
EXPLANATION OF UTILITY TYPE (Date Filed/ Received Stamp by CPUC)			
ELC = Electric GAS = Gas PLC = Pipeline HEAT = Heat	] WATER = Water		
Advice Letter (AL) #: <u>3902-E-C</u>		Tier: <u>2</u>	
Subject of AL: Supplemental: Schedule NE: Keywords (choose from CPUC listing): Comp		on E-4481	
AL filing type: □ Monthly □ Quarterly □ An	<del></del>	ar.	
If AL filed in compliance with a Commission			
Does AL replace a withdrawn or rejected AL?	, and the second		
Summarize differences between the AL and th	<del></del>	<del></del>	
		he utility seeking confidential treatment for: N/A	
Confidential information will be made availab	ŕ	<u> </u>	
Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information: N/A			
Resolution Required? ☐ Yes ☑No			
Requested effective date: <u>June 4, 2012</u> No. of tariff sheets: <u>29</u>			
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: Schedule NEMV (new), Forms 79-1131 (new), 79-1137, and 79-1142 (new)			
Service affected and changes proposed: Submit new Schedule NEMV and new Forms 79-1131 and 79-1142; revise Form 79-1137			
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	Pacific	Gas and Electric Company	
Tariff Files, Room 4005		Brian K. Cherry, Vice President, Regulation and Rates le Street, Mail Code B10C	
DMS Branch 505 Van Ness Ave., San Francisco, CA 94102	P.O. B	ox 770000	
EDTariffUnit@cpuc.ca.gov		ancisco, CA 94177  : PGETariffs@pge.com	

	Advice 3902-L-C
	Cancelling Cal
Title of Sheet	P.U.C. Sheet No.

31546-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 1
31547-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 2
31548-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 3
31549-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 4
31550-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 5
31551-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 6

Cal P.U.C. Sheet No.

Cal P.U.C. Sheet No.	Title of Sheet	Cancelling Cal P.U.C. Sheet No.
31552-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 7	
31553-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 8	
31554-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 9	
31555-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 10	
31556-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 11	
31557-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE	

DELIVERY POINT

Sheet 12

Cal P.U.C. Sheet No.	Title of Sheet	Cancelling Cal P.U.C. Sheet No.
31558-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 13	
31559-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 14	
31560-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 15	
31561-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 16	
31562-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 17	
31563-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 18	

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Cal P.U.C. Sheet No.	Title of Sheet	Cancelling Cal P.U.C. Sheet No.
31564-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 19	
31565-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 20	
31566-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 21	
31567-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 22	
31568-E	ELECTRIC SCHEDULE NEMV VIRTUAL NET METERING FOR A MULTI- TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT Sheet 23	
31569-E	ELECTRIC SAMPLE FORM 79-1131 APPLICATION AND INTERCONNECTION AGREEMENT FOR AN ELIGIBLE GENERATING FACILITY OF 1 MW OR LESS SERVING MULTIPLE TENANTS Sheet 1	

# ATTACHMENT 1 Advice 3902-E-C

Cal P.U.C. Sheet No.	Title of Sheet	Cancelling Cal P.U.C. Sheet No.
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31570-E	ELECTRIC SAMPLE FORM 79-1137 INTERCONNECTION AGREEMENT FOR NET METERING FOR A RENEWABLE ELECTRICAL GENERATION FACILITY OF 1,000 KILOWATTS OR LESS Sheet 1	31323-E
31571-E	ELECTRIC SAMPLE FORM 79-1142 INTERCONNECTION APPLICATION FOR A RENEWABLE ELECTRICAL GENERATION FACILITY OF 1 MEGAWATT OR LESS Sheet 1	
31572-E	ELECTRIC TABLE OF CONTENTS Sheet 1	31539-E
31573-E	ELECTRIC TABLE OF CONTENTS RATE SCHEDULES Sheet 6	31460-E
31574-E	ELECTRIC TABLE OF CONTENTS SAMPLE FORMS Sheet 27	31325-E

Cancelling

Sheet 1

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) | (N) |

(N)

APPLICABILITY:

This virtual net energy-metering schedule is applicable to a multi-tenant or multi-meter<sup>1</sup> property, which includes any residential (whether rental property or a condominiums), commercial and industrial property served at the same Service Delivery Point (SDP)<sup>2</sup>, with the following:

(N) I

Ι

(N)

## a. A Generator Account that:

- (i) consists of a Renewable Electrical Generation Facility, or a combination of those facilities as defined below sized no larger than the energy requirements of all Benefitting Accounts but with a maximum total size of no larger than one megawatt (1,000 kilowatts); and
- (ii) is interconnected with PG&E through a single meter located at the same SDP as all Benefitting Accounts; and
- (iii) has no load other than that required by the Renewable Electrical Generation Facility or the combination of such; and
- (iv) takes service, with the generator owner or their designee as the Customer of record ("Owner"); and

## b. Benefitting Account(s), each of which:

- (i) takes service from PG&E; and
- (ii) is an individually metered, electric account serving a tenant or common area with no other generating facility interconnected with PG&E on the account; and
- (iii) is served from the same SDP as the Renewable Electrical Generation Facility, and
- (iv) does not participate in another virtual net energy metering program or the RES-BCT program.

(Continued)

Advice Letter No: Decision No.

3902-E-C E-4481 Issued by **Brian K. Cherry**Vice President
Regulation and Rates

Date Filed Effective Resolution No. May 4, 2012

(N)

<sup>&</sup>lt;sup>1</sup> Multi-meter" means two or more utility revenue meters participating in the NEMV program, in addition to the Generator Account meter.

As defined in Rule 16, section H, *Definitions for Rule 16.* Note however that customer-owned line extensions that deliver (N) power to other meters on the same property are not considered separate SDPs. (N)

# Cancelling

Sheet 2 (N)

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

APPLICABILITY: (Cont'd.)

The exports from the Generator Account are allocated to the Benefitting Accounts as described in the Special Condition 3 below.

(N)

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(N)

The Generator Account and the Benefitting Accounts will be referred to collectively in this tariff as a "NEMV Arrangement."

A Qualified Customer is either:

- (i) the Owner or Operator of the multi-tenant, multi-meter<sup>1</sup> Property with one or more separately metered accounts;
- (ii) an entity authorized by the owner to install and/or operate the generating facility (Renewable Electrical Generation Facility) and who will be the IOU's customer of record for the Generating Facility (Renewable Electrical Generation Facility); or
- (iii) a tenant/occupant<sup>3</sup> of the Property with a separately metered account, which is physically connected to the same SDP to which the Eligible Generator (Renewable Electrical Generator Facility) is connected.

<sup>3</sup>While this refers to a single metered tenant/occupant, "Multi-meter Property" requires that there be two or more tenant/occupants, each with its own utility revenue meter participating in the NEMV Arrangement, in addition to the Generator Account meter.

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(Continued)

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	ELECTRIC SCHEDULE NEMV  RTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT	(N) (N) (N)
APPLICABILITY: (Cont'd.)	A Renewable Electrical Generation Facility means a generating facility that generates electricity by using:	(N) 
	a) biomass, b) solar thermal, c)photovoltaic, d) wind, e) geothermal, f) fuel cells using renewable fuels, g) small hydroelectric generation (but a small hydroelectric generation facility is not an eligible renewable electrical generation facility if it will cause an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow), h) digester gas, i) municipal solid waste conversion, j) landfill gas, k)ocean wave, l) ocean thermal, or m) tidal current,  and any additions or enhancements to the generating facility using that technology pursuant to paragraph (1) of subdivision (a) of Section 25741 of the Public Resources Code. These renewable sources are defined in the latest version of the California Energy Commission's (CEC's) Renewables Portfolio Standard (RPS) Eligibility Guidebook and the Overall Program Guidebook <sup>4</sup> Service Under Schedule NEMV is available on a first-come, first-served basis to Customers that provide PG&E with:  a. a completed, signed NEMV application and interconnection agreement as described in Special Condition 4, including all supporting documents and required payments; AND  b. evidence of the Customer's final inspection clearance from the governmental authority having jurisdiction over the Renewable Electrical Generation Facility; until such time as the total rated generating capacity used by eligible Customer- generators and Qualified Customers on rate Schedule NEM, NEMV and NEMVMASH, exceeds five (5) percent of PG&E's aggregate customer peak demand (calculation as described in rate Schedule NEM).	 

(Continued)

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 $^4$  The RPS Guidebooks can be found at: http://www.energy.ca.gov/renewables/documents/index.html#rps

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Sheet 4

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

(N)

(N)

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.

**Disconnect/Reconnect** – PG&E will inform the Owner of any disconnect/reconnect procedure charges they may expect at the time of interconnection. Typically these charges range from no charge to \$4000.00, depending on individual circumstances, such as (i) whether the disconnection can be performed locally at a switch or requires additional manpower for circuit switching and/or disconnection work at multiple locations; (2) whether or not the work will be performed on overtime, either due to Qualified Customer's request or the needs of adjacent customers; (3) if the customer requests the PG&E resources to standby for reconnection, and (4) other factors.

# Owner Obligations - The Owner must:

- 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 Renewable Electrical Generation Facility; and
- 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; and
- 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 NEMV Arrangement, including the Owner's name, and their Renewable Electrical Generation Facility location, capacity and operational characteristics, and Qualified Customer names at the Benefitting Accounts; and
- agree to and comply with all applicable rules and requirements of this NEMV Rate Schedule; and

(N)

(Continued)

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Sheet 5

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

(N)

(N)

## APPLICABILITY: (Cont'd.)

Modifications to the Renewable Electrical Generation Facility – If the NEMV Arrangement's Renewable Electrical Generation Facility has not been previously approved for interconnection by PG&E, or where any modification to the previously approved Renewable Electrical Generation Facility has been made, the Owner must complete the interconnection process in Special Condition 4 of this tariff.

Qualified Customers On Direct Access (DA) or Community Choice Aggregation Service (CCA) - 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) and Community Choice Aggregators (CCAs) serving eligible Qualified Customers.

This service is not applicable to a Direct Access (DA) Qualified Customer where the Qualified Customer's ESP does not offer a net energy metering tariff. In addition, if a Qualified Customer 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 virtual net energy metering to the Qualified Customer. As an interim measure, PG&E will provide CCA Service customers on NEMV with a customer-satisfaction adjustment until necessary programming to bill these credits can be completed.

Demand Response Programs - Qualified Customers are eligible for the same demand response programs and solar tariffs as NEM customers. Demand response payments to Qualified Customers will be based on the Qualified Customer's metered usage disregarding any contributions from virtually net-metered generation. Similarly, any other demand response programmatic elements that are affected by a customer's load (e.g., program eligibility) should also exclude from consideration any impacts of NEMV generation. Any payments for demand response will be limited to the customer's load, and not include excess generation exported to the grid during the hours of a demand response event. Any payments for demand response will be limited to the customer's load, and not include excess generation exported to the grid during the hours of a demand response event.

**Change in Owner** – A change in the Owner responsible for the NEMV Arrangement ("Change of Owner"), where no modification to the Eligible Renewable Electrical Generation Facility has been made, does not need to complete the interconnection process in Special Condition 4, as long as the requirements of this section are met. (However, see Special Condition 6 for any re-inspection requirements.)

An Renewable Electrical Generation Facility where there is a change in the Owner responsible for the NEMV Arrangement ("Change of Owner"), but where no modification to the Renewable Generation Facility has been made, may at PG&E's request, need to complete a new Interconnection Agreement and/or interconnection agreement Appendix C (affidavit).

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Sheet 6

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

(N)

(N)

RATES:

For the purposes of calculation of all customer charges, standby charges, and demand charges a NEMV customer should be treated identically as a NEM customer, pursuant to PU Code § 2827(g). The rate and charges for each Benefitting Account under this schedule will be in accordance with its PG&E otherwiseapplicable metered rate schedule (OAS). The Qualified Customer at each Benefitting 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 Benefitting 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 Benefitting Account from PG&E. The power factor, when it applies on the OAS, will be based on the energy consumed at the Benefitting Account from PG&E and the average power factor over the past 12 billing months of operation prior to starting on NEMV. A Benefitting 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 Benefitting Account until the Qualified 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 Benefitting Account's bills. Charges for energy (kWh) at the Benefitting Account supplied by PG&E, ESP or CCA, as applicable, will be based on the net metered usage in accordance with Billing (Special Condition 3 below).

Charges for energy (kWh) for each Benefitting Account supplied by PG&E will be based on the Benefitting Account's net metered usage in accordance with Billing (Special Condition 3, below). For DA or CCA Service Qualified Customers, the ESP or CCA is responsible for providing the billing information regarding the applicable generation related bill charges or credits to PG&E on a timely basis.

The Owner of the Generator Account served under this schedule will be billed under the OAS that contains the appropriate customer-, minimum- and/or meter charges. Qualified Customers who have elected to pay a one-time fee for the installation of a TOU meter pursuant to Special Condition 1.a.(ii) of this Schedule NEMV will be placed on an OAS that does not contain a meter charge. If the Owner elects the monthly meter charge option pursuant to Special Condition 1.a. (ii), the Generator Account shall be placed on an OAS containing a meter charge. The Owner at the 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, as well as the charges in this Schedule NEMV, including those in Special Conditions 1(a) and 2, where applicable.

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

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Sheet 7

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

(N)

**SPECIAL CONDITIONS:**  1. METERING: NEMV net energy metering shall be accomplished at:

(N)

- The Generator Account where the Renewable Electrical Generation Facility is located, using either:
  - (i) An **interval meter** (capable of recording the Renewable Electrical Generation Facility's output in up to fifteen minute increments), if required by PG&E to allocate the Eligible Energy Credit based on the OAS of the Benefitting Accounts in an NEMV Arrangement. For example, if any Benefitting Accounts in the NEMV Arrangement takes service on an OAS with a Demand Charge where the Qualified Customer at the Benefitting Account opts to receive a demand credit pursuant to Special Conditions 1 and 3(f), the Owner must install a PG&E interval meter under this option. The Owner shall be responsible for, and shall bear all costs associated with PG&E providing and installing an interval meter for the Generator Account. The cost of the interval meter installation will be determined by PG&E and will vary on a site specific basis as described below.

If the Owner is participating in a renewable incentive program such as the California Solar Initiative (CSI) Program or the Self-Generation Incentive Program (SGIP), for the Generator Account then the meter installed under this option may also be used to issue performance payments consistent with the current incentive program handbook requirements. This tariff's metering requirements will take precedence over the incentive program metering requirements for the performance meter.

The Owner or Operator selecting this option to use a single meter for the dual purpose of tracking the generation for the NEMV Generator Account and to issue performance based incentives will need to install a meter that must be: 1) a PG&E owned meter, 2) a PG&E read meter where PG&E will read the meter data for purposes of providing an incentive payment 3) installed in a location approved by PG&E. In addition to this metering requirement for incentives, the Owner and Operator will need to contract separately for any Performance Monitoring and Reporting Service (PMRS) as required by the incentive program.

If any Benefitting Accounts in the Arrangement takes service on an OAS with a Demand Charge where the Qualified Customer at the Benefitting Account opts to receive a demand credit pursuant to Special Condition 3(f), the Owner must bear the cost of installing a PG&E interval meter under this option.

(N)

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Sheet 8

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

(N)

**SPECIAL CONDITIONS:** (Cont'd.)

1. METERING (Cont'd.):

(N)

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(N)

- a. The **Generator Account** where the Renewable Electrical Generation Facility is located, using either: (Cont'd.)
  - (i) (Cont'd.):

The costs for the meter will be:

Meter Type	Cost
Self-contained Meter Installation (600V)	\$788.33
Transformer-rated Meter Installation (600V)	\$1,712.89
Primary Transformer-rated Meter Installation (5 kV)	\$6,800.25
Primary Transformer-rated Meter Installation (15 kV)	\$7,410.16
Primary Transformer-rated Meter Installation (25 kV)	\$12,779.41

If Generator Account is on DA service and the Owner uses a third-party Meter Data Management Agent (MDMA) the Owner will be responsible for any and all costs associated with providing PG&E acceptable interval data into the PG&E system on a timely basis.

(ii) a "time-of-use" (TOU) meter, if based on review of the Benefitting Accounts' OASs PG&E is able to allocate the Eligible Energy Credits. This option will only be available until any Benefitting Account OAS change necessitates that the Owner provide an interval meter per (i) in order to properly allocate Eligible Energy Credits. The Owner shall be responsible for, and shall bear all costs associated with, PG&E providing and installing a TOU meter for the Generator Account (or upgrading to an interval meter if required in the future). For the TOU option, the Owner may choose charges based on either a one-time, up-front fee or as a monthly meter charge. Prices are as follows:

TOU Meter Option	One Time upfront fee	Monthly Meter Charge
Single Phase	\$755.00	Based on the OAS monthly meter charge
Three Phase	\$890.00	Based on the OAS monthly meter charge

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Sheet 9

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

(N)

**SPECIAL CONDITIONS:** (Cont'd.)

- METERING: NEMV net energy metering shall be accomplished at: (Cont'd.)
- (N)

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(N)

- The Generator Account where the Renewable Electrical Generation Facility is located, using either: (Cont'd.)
  - (iii) If the Generator Account is found to have any load in addition to that of the Renewable Electrical Generation Facility's 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.
- Each Benefitting Account using PG&E metering appropriate to its OAS. If the Qualifying Customer is on a demand rate OAS and chooses to a receive demand credit, the Qualifying Customer is required to have a meter capable of recording demand data on a 15 minute interval basis. The cost of this meter is the responsibility of the Benefitting Account - or is covered in the OAS of the Benefitting Account. If the Owner in an arrangement where one or more Qualifying Customers have opted to receive demand credits has taken the TOU meter option in a (ii) above for the Generator Account, the Owner will be required to pay for the cost of the interval meter option described in a (i) above for the Generator Account meter. Until the Owner pays this the cost for an interval meter, the Qualifying Customer electing to receive a demand credit will not receive the demand credit.

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Sheet 10

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

(N)

**SPECIAL CONDITIONS:** (Cont'd.)

2. ONE-TIME SETUP AND MODIFICATION CHARGES:

(N)

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Setup - PG&E will bill the Generator Account a one-time setup charge of \$12.00 per Benefitting Account in the NEMV Arrangement when the Owner submits Appendix A to first establish service for a Benefitting Account, as described Special Condition 3 (b). The total setup fee will be limited to no more than \$500.00 per NEMV Arrangement.

Modification - The Owner may make modifications as frequently as needed to any Benefitting Account with a changed allocation when the Owner submits a new Appendix A with a change to the Annual Eligible Energy Credit Allocation, as described Special Condition 3 (g). There will be no charge for up to one change per Benefiting Account per Relevant period; however, subsequent changes per Relevant period will be charged \$3.00 per account change billed to the Generator Account.

Site Assessment - PG&E includes in its NEMV applications (Forms 79-1131 or 79-1142) site assessment questions to collect the necessary technical details to help PG&E and the Owner determine the options for safely interconnecting the applicant's Renewable Electrical Generation Facility. If after review of these completed forms PG&E determines a site assessment is essential, then PG&E may conduct a site assessment at no cost to the Owner. Owners are reminded that entering PG&E sealed sections of their service panels is unsafe and not permitted without PG&E's supervision and express authorization.

Demand Credit - If a NEMV Qualified Customer is on an OAS with demand charges and opts to receive a demand credit, they must notify PG&E and in writing. PG&E will charge the Qualified Customer the upfront payment of \$500 per Benefiting Account receiving a demand credit. PG&E will make the change effective within thirty (30) days of the latter of (a) the receipt of the written request and (b) the installation of an interval meter at the Generator Account.

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Sheet 11

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

(N)

**SPECIAL CONDITIONS:** (Cont'd.)

#### 3. BILLING:

(N)

For each Benefitting Account, consumption or production shall be valued as follows:

#### a. Annual Eligible Energy Credit

The Annual Eligible Energy Credit is the total energy (in kilowatt hours or kWh) exported to PG&E's distribution grid by the Generator Account over the Relevant Period as defined in Special Condition 3 (g).

## b. The Annual Eligible Energy Credit Allocation

The Owner at the time the NEMV Arrangement first takes service under Schedule NEMV shall determine the initial percentage of Annual Eligible Energy Credits to be allocated to the Benefitting Accounts.

This allocation percentage will be specified by the Owner on Appendix A of either of the NEMV application forms described in Special Condition 4.

Once allocated, Credits (in dollars) will be calculated per the OAS for each bundled service Benefitting Account as described in Special Condition 3.c. For a DA and CCA Service Benefiting Account, the Credit will be calculated by the ESP or CCA in accordance with the ESP or CCA's NEMV Program.

#### Monthly Energy Charge/Credit For an OAS with Baseline Rates

A Qualified Customer is a net consumer if the Benefitting Account's Eligible Energy Allocation percentage (A%) times the Renewable Electrical Generation Facility's output (in kWh) is less than the Qualified Customer's usage (Customer Usage), and its net consumption in kWh is equal to:

Customer usage - (A% x Eligible Generation Facility's output) = net consumption

Otherwise the Benefitting Account is a net producer and its net production in KWh is equal to:

(A% x Renewable Electrical Generation Facility output) – Customer Usage= net production

(N)

(Continued)

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Sheet 12

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

(N)

**SPECIAL CONDITIONS:** (Cont'd.)

3. BILLING: (Cont'd.)

(N)

c. Monthly Energy Charge/Credit For an OAS with Baseline Rates (Cont'd.)

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

If the bundled service Qualified Customer is a net generator, the net production shall be valued at the rate for the kWh up to the baseline quantity, if applicable, 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 Benefitting Account's OAS.

For a DA and CCA Service Qualified Customer, applicable Generation Rate Component charges or credits will be calculated by the ESP or CCA in accordance with the ESP or CCA's NEMV Program. Generation Rate Component credits, if any, provided by the ESP or CCA do not reduce any charges owed to PG&E for electric service provided to the Qualified Customer.

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

A Qualified Customer is a net consumer for a discrete TOU period if the Benefitting Account's Eligible Energy Allocation Percentage (A%) times the Renewable Electrical Generation Facility's output (in kWh) for that TOU period (Eligible Generation Facility's TOU output) is less than the Customer's usage (Customer TOU usage) for the TOU period, and its net consumption in kWh is equal to:

Customer TOU usage – (A% x Renewable Electrical Generation Facility TOU output) = net consumption

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

(A% x Renewable Electrical Generation Facility TOU output)—Customer TOU usage = net production

Applicable PG&E charges or credits will be valued as described in this Section 3.

For a DA and CCA Service Qualified Customer, applicable Generation Rate Component charges or credits will be calculated by the ESP or CCA in accordance with the ESP or CCA's NEMV Program. Generation Rate Component credits, if any, provided by the ESP or CCA do not reduce any charges owed to PG&E for electric service provided to the Qualified Customer.

(N)

(Continued)

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Sheet 13

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

(N)

**SPECIAL CONDITIONS:** (Cont'd.)

BILLING (Cont'd.):

(N)

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(N)

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

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

- If the bundled service Qualified 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 Benefitting Account's OAS.
- If the bundled service Qualified 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 Benefitting Account's OAS.

For bundled service Qualified Customers on tiered rates, in the event that at the end of the monthly billing cycle, a Qualified 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).

For a DA and CCA Service Qualified Customer, applicable charges or credits will be calculated by the ESP or CCA in accordance with the ESP or CCA's NEMV Program. Generation Rate Component credits, if any, provided by the ESP or CCA do not reduce any charges owed to PG&E for electric service provided to the Qualified Customer.

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Sheet 14

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

(N)

**SPECIAL CONDITIONS:** (Cont'd.)

BILLING (Cont'd.):

(N)

## For an OAS With Monthly Minimum Charges

For Benefitting 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 3 h below, unless otherwise provided for in the Benefitting Account's OAS.

For bundled service Benefitting Accounts, the net balance of all moneys owed to PG&E for the net energy (kWh) consumed must be paid on each monthly billing cycle. When bundled service Benefitting 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 Qualified Customer's account. until the end of the Relevant Period.

For DA and CCA Service Benefitting Accounts, applicable Generation Rate Component charges or credits will be calculated by the ESP or CCA and treated in accordance with the ESP or CCA's NEMV Program.

#### f. New For an OAS with Demand Charges

A NEMV Qualified Customer on an OAS with demand charges may opt to receive a demand credit as described in Special Condition 2. To bill demand, demand readings from the Generator Account interval meter will be measured in each metered interval, allocated using the same allocation percentage for the Benefiting Account as is listed for that account in Appendix A, and then netted with the Benefiting Account's metered demand for the same interval. The netted demand will then be used for the calculation of the Benefitting Account's demand charges for the purposes of the OAS.

(N)

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#### **ELECTRIC SCHEDULE NEMV**

Sheet 15

Cal. P.U.C. Sheet No.

Cal. P.U.C. Sheet No.

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

(N)

SPECIAL CONDITIONS: (Cont'd.)

3. BILLING (Cont'd.)

(N)

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(N)

g. Relevant Period for Billing and Account Modification

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 Renewable Electrical Generation Facility for purposes of participating in NEMV, and on every subsequent anniversary thereof.

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

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

On a going forward basis, the Owner has the option to add or remove Benefitting Accounts, and/or change the Annual Eligible Energy Credit Allocation to existing Benefitting Accounts.

If the Owner chooses to add or remove accounts or change the allocation, or the Default Account as defined in the next paragraph, it is the responsibility of the Owner of the Generator Account to notify all Benefitting Accounts in the NEMV Arrangement of any change in their Annual Eligible Energy Credit Allocation. In order to elect this option, the Owner must submit (i) a revised Appendix A with the new allocations as described in Special Condition 3 and (ii) a new Appendix B, and (iii) payment of the applicable one-time setup or allocation modification charge described in Special Condition 2, if any. The submission of these three items must be made at least thirty business days prior to the next Billing Cycle start date, for it to be effective upon the first day of the next Billing Cycle. There will be no change to any of the (remaining) Benefitting Accounts' existing Relevant Period. (Charges if any, for account modifications are described in Special Condition 2.)

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Sheet 16

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

(N)

**SPECIAL CONDITIONS:** (Cont'd.)

BILLING (Cont'd.)

(N)

g. Relevant Period for Billing and Account Modification (Cont'd.)

In addition, the Owner has the option to designate a specific Benefiting Account (which could be a Common Area Account) – called the "Default Account" - on Appendix A, to receive the disposition of unallocated credits when any other Benefitting Account in the NEMV Arrangement is closed. Within ten (10) days of receipt of notification by PG&E from the Owner that a Benefitting Account has closed, PG&E will assign the unallocated credits going forward to the Default Account; Similarly, within ten (10) days of receipt of notification by PG&E from the Owner that the closed Benefitting Account has re-opened, PG&E will going forward restore the allocation of generation credits to that account. If the unallocated credits are from a Benefitting Account receiving demand credit as described in Special Condition 3(f), but the Default Account is not at that time receiving demand credits, (i) PG&E must be notified if the Default Account is to receive demand credit and (ii) proper metering as described in Special Condition 2 must be in place before demand credit can be applied. If the unallocated credits are from a Benefitting Account receiving demand credit as described in Special Condition 3(f), but the Default Account is not at that time receiving demand credits, (i) PG&E must be notified if the Default Account is to receive demand credit and (ii) proper metering as described in Special Condition 2 must be in place before demand credit can be applied.

If an Owner terminates service under this rate schedule for the NEMV Arrangement prior to the end of any 12 monthly billing cycles, then the Relevant Period for all Benefitting 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 then the existing Benefitting Account will not result in a new Relevant Period. If a new Annual Eligible Energy Credit Allocation is made to some or all of the Benefitting Accounts it will be treated as described in the section above.

(Continued)

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Sheet 17

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

(N)

**SPECIAL CONDITIONS:** (Cont'd.)

BILLING (Cont'd.):

(N)

h. Relevant Period True Up

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

Where the residential minimum bill applies at the true up for a Bundled Service Benefitting Account, no further amounts will be billed to that Qualified Customer as a result of the true up. Where the minimum bill applies at the true up for a Qualified Customer that has taken DA, CCA Service or transitional bundled commodity cost service for all or part of the Relevant period, the Qualified Customer will be billed for all applicable energy-related components, provided no credit will be allowed for negative components unless the rate for such component is also negative.

If the Qualified Customer is taking service under DA or CCA Service. separate true-ups will be calculated for the applicable PG&E charges and credits and the ESP or CCA charges and credits. If PG&E is the electric commodity service provider, this condition may be modified where the Qualified Customer has signed a contract to sell electricity to PG&E.

For a DA or CCA Service Qualified Customer, Generation Rate Component credits, if any, do not reduce the charges owed to PG&E for energy supplied to the Qualified Customer.

If a Benefitting Account's Relevant Period ends under any of the circumstances described in 3.f above:

- a) The Qualified Customer will pay all charges owed at that time;
- b) No payments shall be made for credits remaining after the true-up; However, in the event the Benefitting Account's allocation of energy (kWh), generated at the associated Generator Account and fed back to the electric grid, exceeds the energy (kWh) consumed during the Relevant Period, compensation shall be made for the excess energy (kWh) as described in Special Condition 5.

(N)

(Continued)

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Sheet 18

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

(N)

**SPECIAL CONDITIONS:** (Cont'd.)

#### BILLING (Cont'd.):

(N)

#### i. Billing Information

PG&E shall provide each Benefitting 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.

## OAS Payment Option

Eligible Small Customer (as defined in Rule 1) Benefitting Accounts will be required to pay monthly, unless they specifically request to pay annually, for the net energy (kWh) consumed. For commercial Benefitting Accounts other than Small Commercial, the net balance of all moneys owed must be paid on each monthly billing cycle. When the Qualified 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 Qualified Customer's account, until the end of the Relevant Period.

# k. Energy Service Providers (ESP) Charges:

If PG&E provides direct access (DA) metering for the ESP, UDC consolidated billing (that is, PG&E Consolidated Billing as described on PG&E's Rule 22), or ESP dual or consolidated billing support services for DA Qualified Customer served under PG&E's rates or their ESP's rates, PG&E may recover the incremental costs related to net energy metering from the customer's ESP as follows:

Metering services: \$104 Metering Service Base charge, plus \$73/hour for on-site work, plus materials.

Billing: \$85/hour plus materials.

(N)

(Continued)

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Sheet 19

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

(N)

**SPECIAL CONDITIONS:** (Cont'd.)

1139

San Francisco, California

#### 4. INTERCONNECTION:

(N)

In order to receive approval for Parallel Operation of the Renewable Electrical Generation Facilities, the Owner must submit a completed PG&E application and interconnection agreement form as follows:

Interconnection Costs: The Owner or Operator of the Eligible Generator must pay all interconnection costs required under Rule 21, including but not limited to re-wiring, trenching, conduit, and other facility costs that are needed.

Facility

Forms Required:

Type:

NEMV NEMV Application and Interconnection Agreement for a Solar Solar or (PV) or Wind Generating Facility of 1 Megawatt or Less (Form Wind 79-1131)

Renewable Generation Facility

Appendix A – Designation of NEMV Generating Account and Benefitting Accounts and their respective Eligible Energy Credit

Appendix B – Owner Affidavit Warranting That NEMV Arrangement Is Sized to Load.

Appendix C- Generator Interconnection Point Documentation NEMV Interconnection Application for an Eligible Renewable Generation Facility of 1 Megawatt or Less (Form 79-1142) Appendix A – Designation of NEMV Generating Account and Benefitting Accounts and their respective Eligible Energy Credit

NEMV Renewable Generation Facility other than Solar (PV) or Wind

Allocation

Appendix B – Owner Affidavit Warranting That NEMV Arrangement Is Sized to Load.

Appendix C- Generator Interconnection Point Documentation Interconnection Agreement For Net Energy Metering For A Renewable Electrical Generation Facility Of 1,000 Kilowatts Or Less (Form 79-1137)

Appendix A - Description Of Generating Facility And Single-Line Diagram (Provided by Customer-Generator)

Appendix B - Any Rule 2 or Rule 21 Agreements for the Installation or Allocation of Special Facilities (Forms 79-255, 79-280, 79-702) or Agreements to Perform Any Tariff Related Work (62-4527)(Formed between the Parties)

Appendix C – Schedule NEM Customer-Generator Warranty That It Meets The Requirements For An Eligible Customer-Generator And Is An Eligible Renewable Electrical Generator Facility Pursuant To Section 2827 Of The California Public **Utilities Code** 

(Continued)

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Sheet 20

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

(N)

**SPECIAL CONDITIONS:** (Cont'd.)

NET SURPLUS ELECTRICITY COMPENSATION (NSC):

(N)

Pursuant to P.U. Code Section 2827 (h)(4)(A), this Special Condition was established to provide a NEMV Benefitting Account having Net Surplus Electricity, (defined as all electricity generated by an eligible Generator Account that is allocated to an eligible Benefitting Account Qualified Customer measured in kilowatt-hours over a Relevant Period – as defined in Special Condition 3(g) of this tariff – that exceeds the amount of electricity consumed by that eligible Benefitting Account Qualified Customer), with Net Surplus Electricity Compensation (NSC) for the Net Surplus Electricity, while leaving other ratepayers unaffected. A NEMV Benefitting Account Qualified Customer who has Net Surplus Electricity will be known as a Net Surplus Generator.

(a) NSC Applicability – All bundled service Net Surplus Generators that satisfy the conditions in the Applicability Section of this tariff and take service under this rate schedule are eligible to receive NSC from PG&E if they have a true-up on, or following, the effective date below.

Net Surplus Generators who receive DA Service from an ESP or who receive CCA Service from a CCA are not eligible to receive NSC from PG&E but may contact their ESP or CCA to see if they provide NSC.

The effective date for a Net Surplus Generator Benefitting Account to begin to be eligible to receive NSC on a NEMV Benefitting Account's true-up will be at the end of its first and every subsequent Reconciliation Period under the NEMV tariff following January 1, 2011.

(Continued)

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#### **ELECTRIC SCHEDULE NEMV**

Sheet 21

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

(N)

SPECIAL CONDITIONS: (Cont'd.)

5. NET SURPLUS ELECTRICITY COMPENSATION (NSC) (Cont'd):

(N)

(b) The **NSC Rate** – The NSC Rate is defined as the simple rolling average of PG&E's default load aggregation point (DLAP) price from 7 a.m. to 5 p.m., for a 12-month period. PG&E shall use the NSC Rate as the value of the electricity portion of its net surplus compensation rate.

PG&E will calculate the NSC Rate each month. It will be effective on the first day of that month and PG&E will use it in the NSC Calculation for any Net Surplus Generators with a Relevant Period completed in that month (True-Up Month).

The **DLAP Cutoff Date** will be defined as the twentieth (20th) day of the month prior to the True-Up Month.

PG&E will wait five (5) days after the DLAP Cutoff Date for the CAISO to have time to finalize the day-ahead PG&E DLAP prices. The NSC Rate will then be calculated as the simple average of the prices for all hours between 7 a.m. and 5 p.m. over a one (1) year period ending on the DLAP Cutoff Date.

- (c) Pursuant to D. 11-06-016, PG&E will modify this tariff to include a Renewable Attribute Adder (RAA) once the California Energy Commission (CEC) determines the implementation methodology.
- (d) Calculation of the NSC NSC is calculated by multiplying any Net Surplus Electricity (kWh) by the NSC Rate in (b) above.

1 (N)

(Continued)

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Regulation and Rates

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### **ELECTRIC SCHEDULE NEMV**

Cancelling

Sheet 22

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

(N)

**SPECIAL CONDITIONS:** (Cont'd.)

5. NET SURPLUS ELECTRICITY COMPENSATION (NSC) (Cont'd.):

(N)

- (e) Options for receiving NSC A NEMV Qualified Customer with NSC will automatically have their NSC applied to any amounts owed to PG&E and then may choose to:
  - (1) take no action and roll any remaining NSC amounts forward to offset subsequent PG&E charges; or
  - (2) request that PG&E issue a check if the NSC remaining amount is greater than one dollar (\$1). A Qualified Customer can select this option by calling PG&E, If the Qualified Customer is closing all their accounts with PG&E, PG&E will automatically send a check;
  - (3) elect not to receive any NSC by completing and submitting form 79-1130 (Customer Request Form not to Receive Net Surplus Compensation) to PG&E to confirm that they do not want to participate. In this case PG&E will zero out any NSC the NEMV Qualified Customer may be otherwise eligible to receive.
- QF Status Qualified Customers receiving net surplus compensation must first demonstrate to PG&E that the Generator Account from which they receive their generation allocation as described in Special Condition 2(b) are Qualifying Facilities in order to receive NSC. Since the Generator Accounts serving all NEMV Qualified Customers currently meet the requirements for a qualifying facility exempt from certification filing at the Federal Energy Regulatory Commission (FERC), no further documentation is required at this time.
- (g) Generator Size Nothing in this Special Condition alters the existing NEMV system sizing requirement. Specifically, in order to be eligible for NSC, the Generator Account system must be intended primarily to offset part or all of the Benefitting Account Qualified Customers' own electrical requirements. Systems that are sized larger than the electrical requirements are not eligible for NEMV and therefore, are not eligible for NSC either.

(N)

(Continued)

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### **ELECTRIC SCHEDULE NEMV**

Cancelling

Sheet 23

VIRTUAL NET METERING FOR A MULTI-TENANT OR MULTI-METER PROPERTY SERVED AT THE SAME SERVICE DELIVERY POINT

(N) (N)

(N)

SPECIAL CONDITIONS: (Cont'd.)

6. RE-INSPECTION

(N)

(N)

Pursuant to Public Utilities Code Section.2827(c)(2), any Owner with an existing Renewable Electrical Generation facility and meter who enters into a new net energy metering contract (for example, form 79-1131 NEMV Application and Agreement for a Solar (PV) or Wind Facility of 1 Megawatt or Less) shall complete and submit a copy of form 79-1125 - NEM / NEMV / NEMVMASH Inspection Report to PG&E, unless the Renewable Electrical Generation Facility and meter have been installed or inspected within the previous three years. The NEM Inspection Report shall be prepared by a California licensed contractor who is not the Owner or operator of the facility and meter. A California licensed electrician shall perform the inspection of the electrical portion of the facility and meter and sign the NEM / NEMV / NEMVMASH Inspection Report. If an inspection is required, the Owner shall submit the fully completed NEM / NEMV / NEMVMASH Inspection Report to PG&E within 90 days of the Owner becoming the Customer of record at this account, or else the Owner agrees to disconnect their Renewable Electrical Generation Facility and inform PG&E it no longer will take service on schedule NEM, NEMV, or NEMVMASH. By signing the interconnection agreement, the NEM / NEMV / NEMVMASH Inspection Report shall be incorporated into it.

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3902-E-C E-4481 Issued by **Brian K. Cherry**Vice President
Regulation and Rates

Date Filed

Effective

Resolution No.

Original Cancelling

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

31569-E

,	(N) (N) (N)

## PLEASE REFER TO ATTACHED SAMPLE FORM

Advice Letter No: Decision No.

3902-E-C E-4481

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Date Filed Effective

May 4, 2012

Resolution No.





## NEMV



# Application and Interconnection Agreement for a Solar (PV) or Wind Generating Facility of 1 Megawatt or Less

**Please note:** This agreement does not constitute an application for rebate and/or incentive programs. For more information on these programs, please visit the program website at the links provided below.

- California Solar Initiative (CSI): Hwww.pge.com/csiH
- Self-Generation Incentive Program (SGIP): Hwww.pge.com/sgip

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

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

## A. Applicability and Purpose:

This Application and Interconnection Agreement for a Solar (PV) or Wind Generating Facility of 1 Megawatt or Less ("Agreement") applies to electric rate schedule NEMV—Virtual Net Energy Metering For A Multi-Tenant And Multi-Meter Property Served At The Same Service Delivery Point for the Owner or designated agent of the Owner ("Owner") who interconnects a single solar photovoltaic and/or wind generating facility sized no larger than for the energy requirements of all eligible Benefitting Accounts (as defined in Schedule NEMV) of the past year but with a maximum total size of no larger than one megawatt or 1,000 kilowatts ("Renewable Electric Generation Facility") that is located at a Single Delivery Point <sup>1</sup> with other individually metered PG&E Benefitting Accounts the will be allocated the benefits of the Renewable Electric Generation Facility as described in NEMV, that meets all the applicability requirements in Schedule NEMV, and that operates in parallel with Pacific Gas and Electric Company's ("PG&E") Distribution System.

The purpose of this Agreement is to allow the Owner to interconnect the Renewable Electric Generation Facility with PG&E's Distribution System, subject to the provisions of this Agreement and PG&E's rate schedule NEMV. Owner has elected to interconnect and operate its Renewable Electric Generation Facility in parallel with PG&E's Distribution System, primarily to offset part or all of the NEMV Arrangement's own electrical requirements of the Benefitting Accounts at the affiliated service delivery point 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.

Note: If this application is for a Renewable Electric Generation Facility with a generator type that is other than solar (PV) and wind covered in Schedule NEMV, please use Application form 79-1142.

В.	Description of Service (This Agreement is being filed for, check all that apply):						
	A New NEMV Renewable Electric Generation Facility interconnection (at an existing service)						
	☐ For Physical/Electrical Changes to an interconnected NEMV Renewable Electric Generation Facility with previous						
	approval by PG&E (adding PV panels, changing inverters, or changing load and/or operations).						
	A New NEMV interconnection in conjunction with a new service. An <b>Application for Service</b> 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).

<sup>&</sup>lt;sup>1</sup> Customer-owned line extensions that deliver power to other meters on the same property are not considered separate SDPs.

A Reallocation of Eligible Energy Generation Credits under NEMV for an Existing Renewable Electric Generation 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 NEMV accounts.					
Special Condition 6 of Schedule NEMV requires that any Customer with an existing generating facility and meter who enters into a new NEMV agreement shall complete and submit a copy of form 79-1125 NEM / NEMV / NEMVMASH Inspection Report to PG&E, unless the electrical generating facility and meter have been installed and/or inspected within the previous three years.					
C. Owner's Renewable Electr	ric Generation Facility Info	rmation - Where will	the Generatir	ng Facility be installed	d?
	Name shown on Owner's	s PG&E service acco	ount	,	
	(Must Match Owner's Na	me on PG&E Energy	/ DIII)		
	Street A	Address			
	<u> </u>				
Ci	ty	Sta	ate	Zip	
	Mailing A	Address		1	
Ci	ty	Sta	ate	Zip	
Business Phone	Home Phone	Fa	ax	Email	
D. Contractor Information (Mu	st be completed even if Con	tractor will not serve	as a PG&E co	ontact).	
Combra	4		0	I	
Contrac	tor		Company N	vame	
	Mailing A	Address			
Ci	ty	Sta	ite	Zip	
Dusiness Phone				F-mail	
Business Phone  This contractor is to be	used as PG&E contact a		Owner to re	Email eceive confidential (	Owner
	nalf of Owner with respect to	-			
E. Other Contact Information (	This information is optional.)				
Contact Pe	lame				
	Mailing <i>i</i>	Address			
	ivialility i	- Address			
City		Sta	ate	Zip	
Business Phone	Fa			Email	
	be used as PG&E contact nalf of Owner with respect to		by Owner to r	eceive confidential (	Jwner

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, Renewable Electric Generation 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 that may result in charges to Owner. Should Owner wish to select a different authorization period, Owner may utilize the "Authorization to Received Customer Information or Act on a Customr's Behalf", which may be found at:

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

www.pge.com/includes/docs/pdfs/shared/newgenerator/solarwindgenerators/standardenet/customer\_behalf\_app.pdf

## 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 Renewable Electric Generation 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 the Renewable Electric Generation 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 NEMV Owner's Renewable Electric Generation Facility. Please contact Generation Interconnection Services at 415-972-5676 or email 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 Renewable Electric Generation 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 NEMV.

## 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, or visiting PG&E's website at <a href="www.pge.com/standardnem">www.pge.com/standardnem</a>). 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.

## **Required Documents for New Applicants:**

- 1. A completed copy of this Agreement, including completed Appendices A, B and C. 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 Benefitting accounts in Owner's name as listed in Appendix A Owners who don't specify an OAS for their Benefitting accounts will be defaulted to Rate Schedule E-1, for residential accounts, A1 for general service accounts (unless required to be on a mandatory rate schedule such a E19 or E20), and AG-1 for agricultural rates when establishing how Owner's Benefitting 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 Renewable Electric Generation 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 generators, circuit breakers and other protective devices of the Renewable Electric Generation Facility, the general location of the Owner's loads relative to the Renewable Electric Generation 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 NEMV Eligible Renewable Electric Generation Facility and utility's Distribution System.
  - b. A description of the specific **inverter**(s) used to control the interconnection between PG&E and the Renewable Electric Generation Facility, including rating, brand name, and model number. Only CEC-certified inverters<sup>2</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 or wind turbine 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 <a href="https://www.pge.com/gen">www.pge.com/gen</a> 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. NEMV customers may be able to combine the generator output meter with an incentive meter. See Schedule NEMV for details and the cost.
- 3. **Site Diagram** The site diagram must show the building or buildings at the same Service Delivery Point that will be included as part of the NEMV Arrangement that meets the single Service Delivery Point requirement in the Applicability Section of NEMV, the meter locations, and denote where the Renewable Electric Generation Facility will be located and interconnected.

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<sup>&</sup>lt;sup>2</sup> The CEC's eligible equipment list can be found under the CSI heading at: www.consumerenergycenter.org/erprebate/equipment.html

	4.	Information regarding any existing <b>insurance coverage</b> (liability and/or property) for the Schedule NEMV 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 Renewable Electric Generation 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.							
		I have insurance. I hereby certify that there is presently insurance coverage in the amount of \$ for the Schedule NEMV 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 NEMV 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.						
	6.	Schedule NEMV may include charges where applicable, including but not limited to that in Special Conditions 1. (metering), 2. (one-time set-up or modification charges) and/or 3 (demand credit set-up charges).						
	7. Appendix C Site Assessment Documentation as described in the cover sheet for Appendix C.							
D	Internet Agreement Forms							
Б.	If this Agreement has been completed electronically, i.t 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 or emailed (with all aforementioned documents scanned and included as attachments) to PG&E at the address noted in Section IV (F), "Notices".							
Pai	rt III	– General Facility						
A	Exr	pected <b>date</b> of Project Completion and PG&E Receipt of Final, Signed-Off Building Permit for Generating Facility?						
7 (.	•	e:						
	Da	<del></del>						
D	Λr	a there any other generators interconnected on this account?						
D.	3. Are there any other generators interconnected on this account?  ☐ Yes							
	If yes, specify what kind of generator							
	□ No							
<u></u>	۸r	e there any possible generator meter access issues?						
C.	$\overline{}$	Yes <b>If yes</b> , check all that apply:						
	Ī	☐ Locked Room/Gate ☐ Meter located inside of facility/residence						
		☐ Unrestrained animal at meter or AC ☐ Other (Please explain)						
		disconnect switch location						
	Ц	No						

D. Are any of your accounts on a Demand Response program?
(Qualified Customers are eligible for the same demand response programs and solar tariffs as NEM customers. Demand response payments to Qualified Customers will be based on the Qualified Customer's metered usage disregarding any contributions from virtually net-metered generation. Similarly, any other demand response programmatic elements that are affected by a customer's load (e.g., program eligibility) should also exclude from consideration any impacts of NEMV generation.)
☐ Yes  If yes, what program are you on?  No.
E. Generator Interconnection Tie-in Point – Does your interconnection satisfy PG&E's Meter Standards (Appendix C of this Agreement)?
☐ Yes ☐ No. Reason: ☐ If after review of a customer's NEMV application PG&E determines a site assessment is essential, then PG&E may conduct a site assessment. Please note that entering PG&E sealed sections of their service panels is unsafe and not permitted without PG&E's supervision and express authorization.
F. Are you planning to meet the requirements specified in the PG&E Greenbook (current reference is "VNEM Installation Requirements, Utility Bulletin TD6999B-005, 02/06/2012)?
☐ Yes ☐ No. Reason:
G. Where are you planning to tie in? Can you provide Switchgear cutsheets, detailing the proposed point of connection and bussing modification / clearances, cutsheets of the NGOM socket, to clearly identify proposed tie-in point?
Location:
H. Is the currently proposed tie-in point a result of restrictions placed on altering the existing panel or equipment within, as imposed by the local authority having jurisdiction?
☐ Yes - What restriction? ☐ No.
I. Have you confirmed the Ampere Interrupting capacity (AIC) rating of the existing panel?
□ Yes           □ No. Reason:
J. Is the account located within a PG&E secondary "network" system?  (Note: PG&E does not allow exporting generators to connect to secondary network systems. Portions of San Francisco and Oakland, where PG&E has a network grid. Customers seeking generator interconnections in San Francisco and Oakland must contact PG&E before beginning any work. See Section II above for more details.)
☐ Yes. ☐ No.
K. Are there existing PG&E gas or other utility's facilities in the vicinity of the proposed point of interconnection?  (Note: Minimum clearances must be maintained from PG&E facilities, as specified in PG&E's Greenbook)
☐ Yes - Describe:            ☐ No.
L. Are you going to require PG&E to arrange to de-energize the service panel for you to safely connect the generator to the service panel?
(Note: that the de-energizing process may be as simple as a PG&E Troubleman opening a switch, or as involved as a

PG&E crew performing switching, an that might be impacted by this de-end to performing such a request.)			dinating with neighboring customers business days advance notice prior		
☐ Yes - Describe: ☐ No.					
M. Can this de-energizing of the service	vice panel be done during	normal business	hours?		
Yes No. If not, what time of the we	eek and time of the day d	o you request this	service disconnection to occur?		
Mon Tues Wed Thu Fraction (circle day of week)	ri Sat Sun	: A (enter time & circ	M / PM le AM or PM)		
Note, the time of de-energe and their input to the process.		ill also depend on	whether other customers are impacted		
N. What is the duration of the service	e disconnection requeste	d?			
Duration	-				
O. Do you need PG&E personnel to	stand by while you perfo	m your work?			
☐ Yes ☐ No					
P. Will you need to obtain clearance panel?	from the local authority h	aving jurisdiction p	orior to PG&E re-energizing the service		
Note; Some cities/counties require that they have inspected the panel prior to reenergizing. You will need to provide proof of the local authority that your work will not require such approval, or be prepared to provide that to PG&E prior to PG&E re-energizing the panel.)					
☐ Yes ☐ No					
Part IV - Description of the Genera	ating Facilities <i>U</i>	se additional she	ets, if necessary.		
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 Mo	odel Number	Disconnect Switch Rating (amps)		

## B. Inverters interconnected with PG&E

2B1B0BList all the inverters that will be interconnected to PG&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>3</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>4</sup> (kW)	Inverter number from (B.) above (1 or 2)
1						
2						

## D. Wind Turbine Equipment (if applicable)

List the wind turbine information requested below. If there is more than one wind turbine of the same type, list the total capacity connected to each inverter you listed in B) above. Write NONE if the inverter is incorporated in the wind turbine and no inverter is required.

No.	Wind Turbine Manufacturer	Wind Turbine Model	Wind Turbine Nameplate Rating kW (per unit) <sup>5</sup>	Wind Turbine CEC Rating (kW) per unit	Quantity of Wind Turbines	Total Capacity (kW) <sup>6</sup>	Turbine Output Voltage	Single or Three Phase	Inverter number from (B) above (1 or 2)
1									

E	Service Panel Short Circuit Interrupting Rating
	For systems larger than 10 kW, what is the short circuit interrupting rating (SCIR) rating of the service pa

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

## F. 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:

<sup>&</sup>lt;sup>3</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>&</sup>lt;sup>4</sup> The total capacity is the PV panel rating times the quantity.

<sup>&</sup>lt;sup>5</sup> For all generation equipment ratings, please use the nameplate rating found on the equipment or in the equipment specifications.

<sup>&</sup>lt;sup>6</sup> The total capacity is the pv panel (or wind turbine) rating times the quantity.

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

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 <a href="mailto:gen@pge.com">gen@pge.com</a>

## G. 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.

## H. 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 NEMV.

## I. 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.

### J. Appendix A, Appendix B and Appendix C

Attached to this agreement are:

- Appendix A Designation of NEMV Generating Account and Benefitting Accounts and their respective Eligible Energy Credit Allocation
- Appendix B -Owner Affidavit Warranting That NEMV Arrangement Is Sized to Load; and
- Appendix C Generator Interconnection Tie-in Point Documentation

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 NEMV Generating Account and Benefitting Accounts and their respective Eligible Energy Credit Allocation

	respe	Clive Eligible Eliergy Credit Allo	Cation
	Project Identificatio	n Number(f	or PG&E's use only)
<u>Secti</u>	on 1 Instructions		
1)	and Interconnection Agreement		formation on the associated Application ility of 1 Megawatt or Less Serving Multi- Generation Facility.
Owner	Name	Address	Date
2)	• •	ning the Annual Eligible Energy Credit Aller an existing NEMV facility, as described	•
	This application is for an allocation	on for the initial, new NEMV Arrangemen	t 📮
	This application is for a realloca	ion for an existing NEMV Arrangement:	
3)	taking service on NEMV. The E		Accounts in the Arrangement that will be with the same Generator Account and all MV Applicability Section to be Eligible

Please note for each row:

- Account Type required the Generator Account row should be completed for the pertinent information for each column indicated; the Benefitting Account rows should be complete for the pertinent information for each column indicated. If there are more Benefitting Accounts than will fit on one page please use additional sheets as required and number pages accordingly.
- Account Address required -- Provide an address, including unit / apartment number, for all Accounts (for the Generator Account you may use the street address of the building upon which the generator will be installed).
- Occupant's / Owner's Name required For the Generator Account enter the Owner's name; for all Benefitting accounts enter the name of the occupant or PG&E customer name for that location.
- PG&E Meter Number required Enter the PG&E Meter Numbers for the all benefitting accounts.
- Otherwise Applicable Rate Schedule required -- Enter the PG&E Otherwise Applicable Rate Schedule (OAS) for the Generator Account and all Benefitting Accounts.
- Eligible Allocation Percentage required -- For each Benefitting Account listed, enter the Eligible Allocation Percentage to two decimal places. The Eligible Energy Allocation Percentage for each Benefitting Account should be established so that the annual kilowatt hours allocated offsets no more than part or all of the customer's own annual electrical requirements. The total of all Benefitting Account Eligible Allocation Percentages in Appendix A for this NEMV Arrangement must equal exactly 100%. If Owner is changing the Eligible Allocation Percentage on an existing NEMV Arrangement, please list all allocations to confirm they add up to 100% and circle the changed allocations.
- Designated Unallocated Credit Account "system operator/qualified customer" has the option to
  designate the disposition of unallocated credits to either: the Common Area Account, or one Benefiting
  Account. In the NEMV tariff this is referred to as the "Default Account."
- 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 this instruction page.) Also indicate on one of the pages if the
  allocation is for a new Arrangement, or an existing Arrangement.

Section 2 Account

Type

Account

**Address** 

(required field)

	(required field)  (for Generator Account use street address for building with generator account)	(Generator Accounts should be under the Owner's Name Please use name listed on PG&E Account bill)	(Required field)	Rate Schedule (Required field)	places. The sum of all Benefitting Account Allocation must total 100%.  For changes to Existing NEMV Arrangements, list all percentages but circle all changed percentages)	Account (optional – check one Common Area or Benefiting Account to
Generator						
Account						
Benefitting						
Accounts 1						
2						
3						
4						<del> </del>
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
Project Ide	ntification NumberIs	(for PG&E's use only) this a reallocation of an existing NEMV Ar			ction 2 Page of	:

Occupant's Name,

(Required field)

**PG&E Meter** 

Number

(Required

Otherwise Eligible Allocation

Percentage

(required - to 2 decimal

**Applicable** 

Rate

Designated

Unallocated

Credit

## Appendix B – Owner Affidavit Warranting That NEMV Arrangement Is Sized to Load

Project Identification Number		per
	•	(for PG&E's use only)
	Address of Generator	
In accordance	with Schedule NEMV, I, Owner warr	ant that:
1)		with this NEMV agreement is sized to offset no more than part or all of nts of all the Benefitting Accounts in this NEMV Arrangement, and
2)		established for <u>each</u> Benefitting Account in Appendix A is sized to e annual usage (kWh) requirement for that specific Benefitting Account.
	Signed,	, Owner, on date:
Owner's Name	(printed)	

## Appendix C - Generator Interconnection Point Documentation

[PG&E to attach current copy or web link providing PG&E's standards and requirements for Virtual Net Metering and PG&E GIS contact information when sending this form to Applicant.]

Applicant attaches the following Documentation:

- the single line diagram to illustrate connection with the selected option provided in the Metering Standard
- the switchgear, switchboard, or main panel cut-sheets/shop drawings detailing the bussing, any modifications, clearances, and proposed point of interconnection. The proposal must include a signed PE stamp and modifications must be certified by the manufacturer or a qualified third party.
- pictures of the point of interconnection (see safety "Note" below.)
- the meter socket cut-sheets of the net generation output meter socket
- · additional material as specified by PG&E

Note: If after review of a customer's NEMV application PG&E determines a site assessment is needed, then PG&E may conduct a site assessment. Owners are reminded that entering PG&E sealed sections of their service panels is unsafe and not permitted without PG&E's supervision and express authorization.

Cancelling

Revised Original Cal. P.U.C. Sheet No. Cal. P.U.C. Sheet No.

31570-E 31323-E

## **ELECTRIC SAMPLE FORM 79-1137**

Sheet 1

INTERCONNECTION AGREEMENT FOR NET METERING FOR A RENEWABLE ELECTRICAL GENERATION FACILITY OF 1,000 KILOWATTS OR LESS

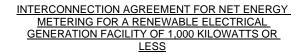
PLEASE REFER TO
ATTACHED SAMPLE FORM
79-1137

Advice Letter No: Decision No.

3902-E-C E-4481 Issued by **Brian K. Cherry**Vice President
Regulation and Rate

Date Filed Effective Resolution No. May 4, 2012

Vice President Resol
1D6 Regulation and Rates





This "Interconnection Agreement for Net Energy Metering for a Renewable Electrical Generation Facility of 1,000 Kilowatts or Less" ("Agreement") 1 is entered into by and between ("Customer-Generator"), Pacific Gas and Electric Company ("PG&E"), a California Corporation. Customer-Generator and PG&E are sometimes also referred to in this Agreement jointly as "Parties" or individually as "Party." In consideration of the mutual promises and obligations stated in this Agreement and its attachments, the Parties agree as follows: 1. **SCOPE AND PURPOSE** This Agreement provides for Customer-Generator to interconnect and operate a Renewable Electrical Generation Facility as defined in Schedule NEM (If this is a NEM Solar or Wind Generating Facility, please use form 79-978) ("Generating Facility") in parallel with PG&E's Distribution System to serve the electrical loads connected to the electric service account that PG&E uses to interconnect Customer-Generator's Generating Facility. Generator's Generating Facility is intended primarily to offset part or all of the Customer-Generator's own electrical requirements. Consistent with, and in order to effectuate, the provisions of Sections 2827 of the California Public Utilities Code and PG&E's electric rate Schedule NEM ("NEM"), Parties enter into this Agreement. This Agreement applies to the Customer-Generator's Generating Facilities identified below with the specified characteristics and generating capacity, and does not allow interconnection or operation of facilities different than those described. 2. SUMMARY AND DESCRIPTION OF CUSTOMER-GENERATOR'S GENERATING FACILITY AND DESIGNATION OF OTHERWISE-APPLICABLE RATE SCHEDULE 2.1 A description of the Generating Facility, including a summary of its significant components and a single-line diagram showing the general arrangement of how Customer-Generator's Generating Facility and loads are interconnected with PG&E's Distribution System, is attached to and made a part of this Agreement. (This description is supplied by Customer-Generator as Appendix A). Generating Facility identification number: (Assigned by PG&E) 2.2 2.3 Customer-Generator's electric service agreement ID number: (Assigned by PG&E) 2.4 Name and address used by PG&E to locate the electric service account used to interconnect the Generating Facility with PG&E's Distribution System: Address: \_\_\_\_\_ City/Zip Code: \_\_\_\_\_

<sup>&</sup>lt;sup>1</sup> Additional forms are available upon request by telephoning 415-972-5676 or on PG&E's website at http://www.pge.com/gen).

## 2.5 Interconnected Equipment:

(Applicants for Schedule NEM can skip sections 2.5 through 2.11)

List all the generating equipment interconnected with, or without, an inverter to PG&E, using the code in the Generation Type Code Table below. (For those generators interconnecting without an inverter, write in "N/A" in the right three columns. If an inverter is shared by more than one generator, write "shared" on the same line as that generator under the manufacturer column and do not enter the inverter rating. Attach list of additional equipment, if applicable.)

Generator Type Code Table			
A – biomass	B – solar thermal	C – geothermal	
D – fuel cell	E – small hydroelectric generation	F – digester gas	
G – municipal solid waste	H – landfill gas	I – ocean wave	
J – ocean thermal	K – tidal current		

	Type of Generator (Enter Generator Type Code)	Generator Rating (kilowatts)	Manufacturer of Inverter used with Generator (if Applicable)	Inverter Model Number (if Applicable)	Inverter Rating (kilowatts) <sup>2</sup> (if Applicable)
1					
2					
3					

2.6	Customer-Generator's otherwise-applicable rate schedule under the provisions of Schedule NEM will be
2.7	The Generating Facility's expected date of Initial Operation is  The expected date of Initial Operation shall be within two years of the date of this Agreement.
2.8	If the date of the permits allowing the Customer-Generator to commence construction of the Generating Facility is prior to January 1, 2003, please provide the date the permits were issued:
2.9	If this Generating Facility is non-inverter based, provide the Gross Nameplate Rating of the Generating Facility: kW.
2.10	If this Generating Facility is non-inverter based, provide the Net Nameplate Rating of the Generating Facility kW.
2.11	The expected annual energy production of the Generating Facility is kWh.

<sup>&</sup>lt;sup>2</sup> If installing an inverter, the inverter rating equals: (the CEC efficiency for each installed inverter) TIMES (the nameplate rating, in kW, of each inverter). The CEC efficiency is obtained on the CEC website at http://www.consumerenergycenter.org/erprebate/eligible\_inverters.html as listed on the date the application is reviewed. Enter the total of all inverter ratings for multiple inverter installations in the Table above.

#### 3. DOCUMENTS INCLUDED AND DEFINED TERMS

3.1 This Agreement includes the following exhibits that are specifically incorporated herein and made a part of this Agreement.

Appendix A Description of Generating Facility and Single-Line Diagram (Supplied by Customer-Generator).

Appendix B A Copy of PG&E's Agreement for Installation or Allocation of Special Facilities (Forms 79-255, 79-280, 79-702) or Agreements to Perform Any Tariff Related Work (62-4527), if applicable (Formed by the Parties).

Appendix C Schedule NEM / NEMV Customer-Generator Warranty That It Meets The Requirements For An Eligible Customer-Generator And Is An Eligible Renewable Electrical Generation Facility Pursuant To Section 2827 Of The California Public Utilities Code

In addition, PG&E Electric Tariff Rules and Rates, including but not limited to Electric Rules 2, 14, 15, 16, and 21, Schedule NEM, and Customer-Generator's otherwise-applicable rate schedule, available at PG&E's website at www.pge.com or by request, are specifically incorporated herein and made part of this Agreement.

3.2 When initially capitalized, whether in the singular or in the plural, the terms used herein shall have the meanings assigned to them either in this Agreement or in PG&E's Electric Rule 21, Section H.

## 4. CUSTOMER BILLING AND PAYMENT

Customer-Generator initially selects Pacific Gas and Electric Company's electric rate schedule referenced in Section 2.6 of this Agreement as its otherwise-applicable rate schedule. Customer-Generator understands that they will be billed according to the otherwise-applicable rate schedule and Schedule NEM.

#### 5. TERM AND TERMINATION

- 5.1 This Agreement shall become effective as of the last date entered in Section 18 below. The Agreement shall continue in full force and effect until the earliest date that one of the following events occurs:
  - (a) The Parties agree in writing to terminate the Agreement.
  - (b) Unless otherwise agreed in writing by the Parties, at 12:01 A.M. on the day following the date the electric service account through which Customer-Generator's Generating Facility is interconnected to PG&E is closed or terminated.
  - (c) At 12:01 A.M. on the 61<sup>st</sup> day after Customer-Generator or PG&E provides written Notice pursuant to Section 11 below to the other Party of Customer-Generator's or PG&E's intent to terminate this Agreement.
- 5.2 Customer-Generator may elect to terminate this Agreement pursuant to the terms

of Section 5.1(c) for any reason. PG&E may elect to terminate this Agreement pursuant to the terms of Section 5.1(c) for one or more of the following reasons:

- (a) A change in applicable rules, tariffs, or regulations, as approved or directed by the Commission, or a change in any local, state or federal law, statute or regulation, either of which materially alters or otherwise affects PG&E's ability or obligation to perform PG&E's duties under this Agreement; or,
- (b) Customer-Generator fails to take all corrective actions specified in PG&E's Notice that Customer-Generator's Generating Facility is out of compliance with the terms of this Agreement within the time frame set forth in such Notice; or,
- (c) Customer-Generator abandons the Generating Facility. PG&E shall deem the Generating Facility to be abandoned if PG&E determines, in its reasonable opinion, the Generating Facility is nonoperational and Customer-Generator does not provide a substantive response to PG&E Notice of its intent to terminate this Agreement as a result of Customer-Generator's apparent abandonment of the Generating Facility affirming Customer-Generator's intent and ability to continue to operate the Generating Facility; or,
- (d) Customer-Generator's Generating Facility ceases to meet all applicable safety and performance standards set out in Section 6.
- Notwithstanding any other provisions of this Agreement, PG&E shall have the right to unilaterally file with the Commission, pursuant to the Commission's rules and regulations, an application to terminate this Agreement.
- 5.4 Any agreements attached to and incorporated into this Agreement shall terminate concurrently with this Agreement unless the Parties have agreed otherwise in writing.

#### 6. GENERATING FACILITY REQUIREMENTS

- 6.1 Customer-Generator's Generating Facility 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 Commission regarding safety and reliability including Rule 21.
- 6.2 Customer-Generator shall: (a) maintain the Generating Facility and Interconnection Facilities in a safe and prudent manner and in conformance with all applicable laws and regulations including, but not limited to, Section 6.1, and (b) obtain any governmental authorizations and permits required for the construction and operation of the Generating Facility and Interconnection Facilities. Customer-Generator shall reimburse PG&E for any and all losses, damages, claims, penalties, or liability it incurs as a result of Customer-Generator's failure to obtain or maintain any governmental authorizations and permits required for construction and operation of Customer-Generator's Generating Facility.
- 6.3 Customer-Generator shall not commence parallel operation of the Generating Facility until PG&E has provided express written approval. Such approval shall normally be provided no later than thirty (30) business days following PG&E's receipt of: (1) a completed *Generating Facility Interconnection Application* (Form 79-974) or for a NEMV Renewable Electrical Generating Facility (non-PV-Solar or Wind), NEMV

Interconnection Application for a Renewable Electrical Generating Facility of 1 Megawatt or Less (Form 79-1142), including all supporting documents and payments as described in the Application; (2) a completed Expanded Net Energy Metering (NEM) Supplemental Application (Form 79-998 ³); (3) a signed and completed this Agreement (Form 79-1137); and (4) a copy of the Customer-Generator's final inspection clearance from the governmental authority having jurisdiction over the Generating Facility. Such approval shall not be unreasonably withheld. PG&E shall have the right to have representatives present at the Commissioning Test as defined in Rule 21. Customer-Generator shall notify PG&E at least five (5) business days prior to the initial testing.

### 7. INTERCONNECTION FACILITIES

- 7.1 Customer-Generator and/or PG&E, as appropriate, shall provide Interconnection Facilities that adequately protect PG&E's Distribution System, personnel, and other persons from damage or injury, which may be caused by the operation of Customer-Generator's Generating Facility.
- 7.2 Customer-Generator shall be solely responsible for the costs, design, purchase, construction, permitting, operation, and maintenance of the Interconnection Facilities that Customer-Generator owns.
- 7.3 If the provisions of PG&E's Electric Rule 21, or any other tariff or rule approved by the Commission, require PG&E to own and operate a portion of the Interconnection Facilities, Customer-Generator and PG&E shall promptly execute an Special Facilities Agreement that establishes and allocates responsibility for the design, installation, operation, maintenance, and ownership of the Interconnection Facilities. This Special Facilities Agreement shall be attached to and made a part of this Agreement as Appendix B.

#### 8. LIMITATION OF LIABILITY

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages of any kind whatsoever.

#### 9. INSURANCE

Customer-Generator Facility is required to comply with standards and rules set forth in section 6 and provide the following for insurance policies in place.

Customer-Generator shall furnish the required certificates and all endorsements to PG&E prior to Parallel Operation.

The certificate shall provide thirty (30) calendar days' written notice to PG&E prior to cancellation, termination, alteration, or material change of such insurance.

PG&E shall have the right to inspect or obtain a copy of the original policy or policies of insurance.

<sup>3</sup> Applicants for Schedule NEMV do not need to submit Form 79-998)

9.1 If at any time during this agreement the Customer-Generator fails to meet the requirements in section 6, the following insurance shall apply:

Customer-Generator shall procure and maintain a commercial general liability insurance policy at least as broad as the Insurance Services Office (ISO) commercial general liability coverage "occurrence" form; or, if Customer-Generator is an individual, then liability coverage with respect to premises and use at least as broad as the ISO homeowners' or personal liability Insurance occurrence policy form, or substitute, providing equivalent coverage no less than the following limits, based on generator size:

- (a) Two million dollars (\$2,000,000) for each occurrence if the Gross Nameplate Rating of the Generating Facility is greater than one hundred (100) kW; or
- (b) One million dollars (\$1,000,000) for each occurrence if the Gross Nameplate Rating of the Generating Facility is greater than twenty (20) kW and less than or equal to one hundred (100) kW; or
- (c) Five hundred thousand dollars (\$500,000) for each occurrence if the Gross Nameplate Rating of the Generating Facility is twenty (20) kW or less;
- (d) Two hundred thousand dollars (\$200,000) for each occurrence if the Gross Nameplate Rating of the Generating Facility is ten (10) kW or less and the Generating Facility is connected to an account receiving residential service from PG&E.

The insurance shall, by endorsement, shall:

- (a) Add PG&E as an additional insured;
- (b) State that coverage provided is primary and is not in excess to or contributing with any insurance or self-insurance maintained by PG&E.
- (c) Contain a severability of interest clause or cross-liability clause.
- 9.2 If Customer-Generator's Generating Facility is connected to an account receiving residential service from PG&E and the requirement of Section 9.1 prevents Customer-Generator from obtaining the insurance required in this Section, then upon Customer-Generator's written Notice to PG&E in accordance with Section 11.1, the requirements of Section 9.1 may be waived.
- 9.3 Customer-Generator may self-insure with approval from PG&E. Evidence of an acceptable plan to self-insure, at least thirty (30) calendar days' prior to operations shall be submitted.
  - If Customer-Generator ceases to self-insure to the level required hereunder, or if Customer-Generator is unable to provide continuing evidence of Customer-Generator's ability to self-insure, Customer-Generator agrees to immediately obtain the coverage required under agreement.
- 9.4 All required certificates, endorsements or letters of self-insurance shall be issued and submitted to the following:

Pacific Gas and Electric Company Attn: Generation Interconnection Services P.O. Box 770000 Mail Code N7L San Francisco, California 94177

#### 10. INDEMNITY FOR FAILURE TO COMPLY WITH INSURANCE PROVISIONS

- 10.1 If Customer-Generator fails to comply with the insurance provisions of this Agreement, Customer-Generator shall, at its own cost, defend, save harmless and indemnify PG&E, its directors, officers, employees, agents, assignees, and successors in interest from and against any and all loss, liability, damage, claim, cost, charge, demand, or expense of any kind or nature (including attorney's fees and other costs of litigation) resulting from the death or injury to any person or damage to any property, including the personnel and property of the utility, to the extent that the utility would have been protected had Customer-Generator complied with all such insurance provisions. The inclusion of this Section 10.1 is not intended to create any expressed or implied right in Customer-Generator to elect not to provide any such required insurance.
- 10.2 The provisions of this Section 10 shall not be construed to relieve any insurer of its obligations to pay any insurance claims in accordance with the provisions of any valid insurance policy.

#### 11. NOTICES

11.1 Any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person or sent by first class mail, postage prepaid, to the person specified below:

If to PG&E: Pacific Gas and Electric Company

Attn: Generation Interconnection Services

P.O. Box 770000 Mail Code N7L

San Francisco, California 94177

- 11.2 A Party may change its address for Notices at any time by providing the other Party notice of the change in accordance with Section 11.1.
- 11.3 The Parties may also designate operating representatives to conduct the daily communications, which may be necessary or convenient for the administration of this Agreement. Such designations, including names, addresses, and phone numbers

## INTERCONNECTION AGREEMENT FOR NET ENERGY METERING FOR A RENEWABLE ELECTRICAL GENERATION FACILITY OF 1,000 KILOWATTS OR LESS

may be communicated or revised by one Party's Notice to the other.

## 12. REVIEW OF RECORDS AND DATA

- 12.1 PG&E shall have the right to review and obtain copies of Customer-Generator's operations and maintenance records, logs, or other information such as Generating Facility availability, maintenance outages, circuit breaker operation requiring manual reset, relay targets and unusual events pertaining to Customer-Generator's Generating Facility or its interconnection to PG&E.
- 12.2 Customer-Generator authorizes to release to the California Energy Commission (CEC) information regarding Customer-Generator's facility, including customer name and Generating Facility location, size, and operational characteristics, as requested from time to time pursuant to the CEC's rules and regulations.

#### 13. ASSIGNMENT

Customer-Generator shall not voluntarily assign its rights nor delegate its duties under this Agreement without PG&E's written consent. Any assignment or delegation Customer-Generator makes without PG&E's written consent shall not be valid. PG&E shall not unreasonably withhold its consent to Customer-Generator's assignment of this Agreement.

## 14. NON-WAIVER

None of the provisions of this Agreement shall be considered waived by a Party unless such waiver is given in writing. The failure of a Party to insist in any one or more instances upon strict performance of any of the provisions of this Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishment of any such rights for the future, but the same shall continue and remain in full force and effect.

## 15. GOVERNING LAW, JURISDICTION OF COMMISSION, INCLUSION OF PG&E's TARIFF SCHEDULES AND RULES

- 15.1 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 without giving effect to choice of law provisions that might apply to the law of a different jurisdiction.
- 15.2 This Agreement shall, at all times, be subject to such changes or modifications by the Commission as it may from time to time direct in the exercise of its jurisdiction.
- 15.3 The interconnection and services provided under this Agreement shall at all times be subject to the terms and conditions set forth in the Tariff Schedules and Rules applicable to the electric service provided by PG&E, which Tariff Schedules and Rules are hereby incorporated into this Agreement by this reference.
- Notwithstanding any other provisions of this Agreement, PG&E shall have the right to unilaterally file with the Commission, pursuant to the Commission's rules and regulations, an application for change in rates, charges, classification, service, tariff or rule or any agreement relating thereto.

#### 16. AMENDMENT AND MODIFICATION

## INTERCONNECTION AGREEMENT FOR NET ENERGY METERING FOR A RENEWABLE ELECTRICAL GENERATION FACILITY OF 1,000 KILOWATTS OR LESS

This Agreement can only be amended or modified by a writing signed by both Parties.

#### 17. ENTIRE AGREEMENT

This Agreement, including any incorporated Tariff Schedules and Rules, contains the entire Agreement and understanding between the Parties, their agents, and employees as to the subject matter of this Agreement. Each party also represents that in entering into this Agreement, it has not relied on any promise, inducement, representation, warranty, agreement or other statement not set forth in this Agreement or in the incorporated Tariff Schedules and Rules.

#### 18. SIGNATURES

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their duly authorized representatives. This Agreement is effective as of the last date set forth below.

CUSTOMER-GENERATOR'S NAME	PACIFIC GAS AND ELECTRIC COMPANY
Ву:	Ву:
Name:	Name:
Title:	Manager, Title: Generation Interconnection Services
Date:	Date:

## INTERCONNECTION AGREEMENT FOR NET ENERGY METERING FOR A RENEWABLE ELECTRICAL GENERATION FACILITY OF 1,000 KILOWATTS OR LESS

APPENDIX A
DESCRIPTION OF GENERATING FACILITY
AND SINGLE-LINE DIAGRAM
(Provided by Customer-Generator)

Page 1 of \_\_\_\_
Automated Document, Preliminary Statement A

## INTERCONNECTION AGREEMENT FOR NET ENERGY METERING FOR A RENEWABLE ELECTRICAL GENERATION FACILITY OF 1,000 KILOWATTS OR LESS

## APPENDIX B (If Applicable)

Any Rule 2 or Rule 21 Agreements for the Installation or Allocation of Special Facilities (Forms 79-255, 79-280, 79-702) or Agreements to Perform Any Tariff Related Work (62-4527) (Formed between the Parties)

Page 1 of \_\_\_\_\_
Automated Document, Preliminary Statement A

## Appendix C

SCHEDULE NEM CUSTOMER-GENERATOR WARRANTY THAT IT MEETS THE REQUIREMENTS FOR AN ELIGIBLE CUSTOMER-GENERATOR AND IS AN ELIGIBLE RENEWABLE ELECTRICAL GENERATION FACILITY PURSUANT TO SECTION 2827 OF THE CALIFORNIA PUBLIC UTILITIES CODE

(This Affidavit needs to be completed and submitted to PG&E by the Customer-Generator every time a new NEM or NEMV interconnection agreement for a Renewable Electrical Generation Facility is executed or whenever there is a change in ownership of the Generating Facility)

Circle Type of Renewable Electrical Generation Facility:

Biomass	geothermal	municipal solid waste
solar thermal	fuel cell	landfill gas
small hydroelectric generation	ocean wave	digester gas
ocean thermal	tidal current	

NEM / NEMV Customer-Generator ("Customer") declares that

- (1) it meets the requirements to be an "Eligible Customer-Generator" and its Generating Facility
- (2) (a) meets the requirements of an "Renewable Electrical Generation Facility", as defined in Section 2827(b)(5) of the California Public Utilities Code and (b) satisfies the definitions of the renewable resource for the Renewable Electrical Generation Facility in the latest version of the California Energy Commission's (CEC's) Renewables Portfolio Standard (RPS) Eligibility Guidebook and the Overall Program Guidebook <sup>4</sup>. ("Eligibility Requirements").

Included in these eligibility requirements (check as applicable) pursuant to Public Utilities Code section 2827(b)(5) and Public Resource Code Section 25741 paragraph 1(a):

If the Renewable Electrical Generation Facility is a <u>fuel cell</u> , or otherwise uses renewable biogas or otherwise, Eligible Customer-Generator warrants that the fuel cell is powered solely with renewable fuel.
☐ If the Renewable Electrical Generation Facility is a Small hydroelectric generating facility, customer warrants that it will not cause an adverse impact on instream beneficial uses, nor cause a change in the volume or timing of streamflow).
ne Customer uses biogas or a renewable fuel as the fuel for their Renewable Electric Generation cility:  Eligible Customer-Generator warrants that the Renewable Generation Facility is powered
solely with renewable fuel.

Eligible Customer-Generator warrants that, beginning on the date of Initial Operation and continuing throughout the term of this Agreement, Eligible Customer-Generator and the Generating Facility shall continue to meet the Eligibility Requirements. If Eligible Customer-Generator or the Generating

Form 79-1137 Filed May 2012 Advice 3902-E-C

Page 1 of 2

<sup>&</sup>lt;sup>4</sup> The RPS Guidebooks can be found at: http://www.energy.ca.gov/renewables/documents/index.html#rps

## INTERCONNECTION AGREEMENT FOR NET ENERGY METERING FOR A\_ RENEWABLE ELECTRICAL GENERATION FACILITY OF 1,000 KILOWATTS OR LESS

Facility ceases to meet the Eligibility Requirements, Eligible Customer-Generator shall promptly provide PG&E with Notice of such change pursuant to Section 11 of this Agreement. If at any time during the term of this Agreement PG&E determines, at its reasonable discretion, that Eligible Customer-Generator or Generating Facility may no longer meet the Eligibility Requirements, PG&E may require Eligible Customer-Generator to provide evidence that Eligible Customer-Generator and/or Generating Facility continues to meet the Eligibility Requirements, within 15 business days of PG&E's request for such evidence. Additionally, PG&E may periodically (typically, once per year) inspect Producer's Generating Facility and/or require documentation from Eligible Customer-Generator to monitor the Generating Facility's compliance with the Eligibility Requirements. If PG&E determines at its reasonable judgment that Eligible Customer-Generator either failed to provide evidence in a timely manner or that it provided insufficient evidence that its Generating Facility continues to meet the Eligibility Requirements, then the Eligibility Status shall be deemed ineffective until such time as Eligible Customer-Generator again demonstrates to PG&E's reasonable satisfaction that Eligible Customer-Generator meets the requirements for an Eligible Customer-Generator and/or the Generating Facility meets the requirements for a Eligible electrical generating facility (the "Eligibility Status Change").

PG&E shall revise its records and the administration of this Agreement to reflect the Eligibility Status Change and provide Notice to Eligible Customer-Generator of the Eligibility Status Change pursuant to Section 11 of this Agreement. Such Notice shall specify the effective date of the Eligibility Status Change. This date shall be the first day of the calendar year for which PG&E determines in its reasonable discretion that the Eligible Customer-Generator and/or Generating Facility first ceased to meet the Eligibility Requirements. PG&E shall invoice the Eligible Customer-Generator for any tariff charges that were not previously billed during the period between the effective date of the Eligibility Status Change and the date of the Notice in reliance upon Eligible Customer-Generator's representations that Eligible Customer-Generator and/or Generating Facility complied with the Eligibility Requirements and therefore was eligible for the rate treatment available under the Net Energy Metering provisions of PG&E's Schedule NEM or NEMV, Net Energy Metering Service for Eligible Customer-Generators.

Any amounts to be paid or refunded by Eligible Customer-Generator, as may be invoiced by PG&E pursuant to the terms of this warranty, shall be paid to PG&E within 30 days of Eligible Customer-Generator's receipt of such invoice.

Unless otherwise ordered by the CPUC, this Agreement at all times shall be subject to such modifications as the CPUC may direct from time to time in the exercise of its jurisdiction.

I certify the above is true and correct,

Customer-Generato	r Signature:	
Name:		
Title:		
Date:		<u></u>

Original Cancelling

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

31571-E

(N)

<b>ELECTRIC SAMPLE FORM 79-1142</b>	Sheet 1	(N)
DNNECTION APPLICATION FOR A RENEWABLE ELECTRICAL	_	(N)

INTERCONNECTION APPLICATION FOR A RENEWABLE ELECTRICAL

GENERATION FACILITY OF 1 MEGAWATT OR LESS

PLEASE REFER TO ATTACHED SAMPLE FORM

Advice Letter No: Decision No.

3902-E-C E-4481

Issued by Brian K. Cherry Vice President Regulation and Rates Date Filed Effective Resolution No. May 4, 2012

1D7





## NEMV



# Interconnection Application for a Renewable Electrical Generation Facility of 1 Megawatt or Less

**Please note:** This Application does not constitute an application for rebate and/or incentive programs. For more information on these programs, please visit the program website at the links provided below.

- California Solar Initiative (CSI): www.pge.com/csi
- Self-Generation Incentive Program (SGIP): <u>www.pge.com/sgip</u>

Project Identification Number	(for PG&E's use only)
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## Part I – Identifying the Generating Facility's Location and Responsible Parties

## A. Applicability and Purpose:

This NEMV Interconnection Application for a Renewable Electrical Generation Facility of 1 Megawatt or Less ("Application") applies to electric rate schedule NEMV— Virtual Net Energy Metering For A Multi-Tenant Or Multi-Meter Property Served At The Same Service Delivery Point for the Owner or designated agent of the Owner ("Owner") who interconnects a Renewable Electrical Generation Facility sized no larger than for the energy requirements of all eligible Benefitting Accounts (as defined in Schedule NEMV) of the past year but with a maximum total size of no larger than one megawatt or 1,000 kilowatts ("Renewable Electric Generation Facility") that is located at a Single Delivery Point 1 with other individually metered PG&E Benefitting Accounts the will be allocated the benefits of the Renewable Electric Generation Facility as described in NEMV, that meets all the applicability requirements in Schedule NEMV, and that operates in parallel with Pacific Gas and Electric Company's ("PG&E") Distribution System.

The purpose of this Application is to allow the Owner to apply for the interconnect the Renewable Electric Generation Facility with PG&E's Distribution System, subject to the provisions of this Application and PG&E's rate schedule NEMV. Owner has elected to interconnect and operate its Renewable Electric Generation Facility in parallel with PG&E's Distribution System, primarily to offset part or all of the NEMV Arrangement's own electrical requirements of the Benefitting Accounts at the affiliated service delivery point as listed in Appendix A. Owner shall comply at all times with this Application as well as with all applicable laws, tariffs and applicable requirements of the Public Utilities Commission of the State of California.

**Note**: If this application is for a Renewable Electric Generation Facility with a generator type that is solar (PV) and/or wind, please use Application form 79-1131.

В.	Description of Service (This Application is being filed for, check all that apply):
	A New NEMV Renewable Electric Generation Facility interconnection (at an existing service)

	•	•		•	,	
For Physical/Electrical Changes to an intercon	nected NEMV	Renewable	Electric G	eneratio	n Facility v	vith previous
approval by PG&E (adding PV panels, changing	ng inverters, or	changing lo	ad and/or	operation	ons).	
A A I A I THE A STATE OF THE ST	***					

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A New N	IEMV inte	erconn	ection	in cor	njunctio	n v	vith	a new service	. An	App	lication	for \$	Service	must l	be comp	leted
Additiona	al fees m	ay be	require	ed if a	service	o e	· lin	e extension is	requi	ired (	in accor	danc	e with l	PG&E I	Electric F	Rules
15 and 1	6). Pleas	e con	tact Po	G&E a	t 1-800	-P(	GE-	5000 (or 1-800	0-743	3-500	0).					

<sup>&</sup>lt;sup>1</sup> Customer-owned line extensions that deliver power to other meters on the same property are not considered separate Service Delivery Points.

A Reallocation of Eligible Energy Generation Credits under NEMV for an Existing Renewable Electric Generation 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 NEMV accounts.									
Special Condition 6 of Schedule NEMV requires that any Customer with an existing generating facility and mete who enters into a new NEMV Agreement (Form 79-1137) shall complete and submit a copy of form 79-1125 NEM / NEMV / NEMVMASH Inspection Report to PG&E, unless the electrical generating facility and meter have been installed and/or inspected within the previous three years.									
C. Owner's Renewable Electric	c Generation Facility Informat	ion - Where will the Generatin	ng Facility be installed?						
	Name shown on Owner's PG	&E service account	ig r domy so metaned.						
	(Must Match Owner's Name of	on PG&E Energy Bill)							
	Ctroot Addr	200							
	Street Addre	<del>255</del>							
City	,	State	Zip						
City		Oldio	<u> </u>						
	Mailing Addr	ess							
City	1	State	Zip						
Business Phone	Home Phone	Fax	Email						
D. Contractor Information (Musi	D. Contractor Information (Must be completed even if Contractor will not serve as a PG&E contact).								
Contracto	or	Company I	Name						
Contradic									
Contracto	Mailing Addr	ess							
Somitable	Mailing Addr	ess							
City	•	ess State	Zip						
City			•						
City  Business Phone	Fax	State	Email						
Business Phone  This contractor is to be used.		State  State  s authorized by Owner to re	Email						
Business Phone  This contractor is to be used.	Fax used as PG&E contact and is	State  State  s authorized by Owner to re	Email						
Business Phone  This contractor is to be uninformation and act on behavior	Fax used as PG&E contact and is	State  State  s authorized by Owner to re	Email						
Business Phone  This contractor is to be uninformation and act on behavior	Fax used as PG&E contact and is alf of Owner with respect to this this information is optional.)	State  State  s authorized by Owner to re	Email eceive confidential Owner						
Business Phone  This contractor is to be uninformation and act on behavior.  E. Other Contact Information (T	Fax used as PG&E contact and is alf of Owner with respect to this this information is optional.)	State s authorized by Owner to re Application.  Company N	Email eceive confidential Owner						
Business Phone  This contractor is to be uninformation and act on behavior.  E. Other Contact Information (T	Fax used as PG&E contact and is alf of Owner with respect to this this information is optional.)	State s authorized by Owner to re Application.  Company N	Email eceive confidential Owner						
Business Phone  This contractor is to be uninformation and act on behavior.  E. Other Contact Information (T	Fax used as PG&E contact and is alf of Owner with respect to this this information is optional.) son  Mailing Addr	State s authorized by Owner to re Application.  Company N	Email eceive confidential Owner						
Business Phone This contractor is to be uninformation and act on behavior and act on behavior and act on the contact Information (Tour Contact Per	Fax used as PG&E contact and is alf of Owner with respect to this this information is optional.) son  Mailing Addr	State s authorized by Owner to re Application.  Company I	Email ecceive confidential Owner  Name						
Business Phone  This contractor is to be usinformation and act on behaviors.  E. Other Contact Information (Tour Contact Per C	Fax used as PG&E contact and is alf of Owner with respect to this this information is optional.) son  Mailing Addr	State  s authorized by Owner to re Application.  Company I	Email ecceive confidential Owner  Name  Zip  Email						

By checking the boxes above and signing this Application, Owner authorizes PG&E to release information to the contact(s) named above regarding Owner's usage and billing information, Renewable Electric Generation 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 Application is received by PG&E. Contact(s) are also authorized to make changes to rates and metering arrangements that may result in charges to Owner. Should Owner wish to select a different authorization period, Owner may utilize the "Authorization to Received Customer Information or Act on a Customr's Behalf", which may be found at:

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

www.pge.com/includes/docs/pdfs/shared/newgenerator/solarwindgenerators/standardenet/customer\_behalf\_app.pdf

## 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 Renewable Electric Generation 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 the Renewable Electric Generation Facility

Notwithstanding any other provision of this Application, 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 NEMV Owner's Renewable Electric Generation Facility. Please contact Generation Interconnection Services at 415-972-5676 or email 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 Renewable Electric Generation Facility. Other approvals and/or other agreements may be needed for special PG&E programs or regulatory agency requirements.

## **Stale Applications**

If this Application 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 NEMV.

## A. Application Package:

These documents are needed at the time of application 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, or visiting PG&E's website at <a href="www.pge.com/standardnem">www.pge.com/standardnem</a>). Owners should not delay sending any part of the Application 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.

## **Required Documents for New Applicants:**

- 1. A completed copy of this Application, including completed Appendices A, B and C. 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 Application, Owner will confirm their otherwise-applicable rate schedule (OAS) for all Benefitting accounts in Owner's name as listed in Appendix A Owners who don't specify an OAS for their Benefitting accounts will be defaulted to Rate Schedule E-1, for residential accounts, A1 for general service accounts (unless required to be on a mandatory rate schedule such a E19 or E20), and AG-1 for agricultural rates when establishing how Owner's Benefitting 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 Renewable Electric Generation 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 generators, circuit breakers and other protective devices of the Renewable Electric Generation Facility, the general location of the Owner's loads relative to the Renewable Electric Generation 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 NEMV Eligible Renewable Electric Generation Facility and utility's Distribution System.
  - b. A description of the specific **inverter**(s), if any, used to control the interconnection between PG&E and the Renewable Electric Generation Facility, including rating, brand name, and model number. Only CEC-certified inverters<sup>2</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 generator manufacturer name, model number, number of panels, and the nameplate rating. As with the inverters, only CEC-certified equipment will pass the requirements for Simplified Interconnection. (See the PG&E website <a href="www.pge.com/gen">www.pge.com/gen</a> or the CEC website in footnote below.) For generator equipment that is not CEC certified, Applicant may need to provide additional information and/or documentation at PG&E's request.
  - 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. NEMV customers may be able to combine the generator output meter with an incentive meter. See Schedule NEMV for details and the cost.
- Site Diagram The site diagram must show the building or buildings at the same Service Delivery Point that will
  be included as part of the NEMV Arrangement that meets the single Service Delivery Point requirement in the
  Applicability Section of NEMV, the meter locations, and denote where the Renewable Electric Generation Facility
  will be located and interconnected.
- 4. Information regarding any existing **insurance coverage** (liability and/or property) for the Schedule NEMV 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

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<sup>&</sup>lt;sup>2</sup> The CEC's eligible equipment list can be found under the CSI heading at: www.consumerenergycenter.org/erprebate/equipment.html

			required to install additional controls, per urance.	form	or pay for additional tests, or purchase additional liability
			personal liability insurance, Owner agrees the Application in no less amounts than those of the right to inspect or obtain a copy of the or	hat it currer rigina	roperty insurance and commercial general liability or will maintain such insurance in force for the duration of this atly in effect. Pacific Gas and Electric Company shall have all policy or policies of insurance prior to commencing ments of this section, Owner shall not be required to purchase
			I have insurance. I hereby certify that there \$ for the Schedule NEM		
			Insuring Company's Name:		
			Insurance Policy #		
			I do not have insurance. I hereby certify the NEMV Generating Facility location.	at the	re is presently \$0 (zero) dollars of insurance for the Schedule
	5.	loc		he C	(building permit) for Owner's Generating Facility from the owner's project. Owner's Application package will not be
	6.				able, including but not limited to that in Special Conditions 1. es) and/or 3. (demand credit set-up charges).
	7.	Аp	pendix C Site Assessment Documentation	n as	described in the cover sheet for Appendix C.
_	lt		4 Application Forms		
В.			et Application Forms		nay be submitted to PG&E via e-mail or U.S. mail. Copies or
	fori afo	ns r	equiring a signature, attachments or any appentioned documents scanned and included	licab	le fees described in Part II must be mailed or emailed (with all tachments) to PG&E at the address noted in Section IV (D),
Pa	rt III	– G	eneral Facility		
Δ	Evr	ne ct	ed date of Project Completion and PG&F Re	coint	of Final, Signed-Off Building Permit for Generating Facility?
_ ^			·	ceipi	or mar, signed-on building Fermit for Generating Facility:
	Da	ie: _			
В			ere any other generators interconnected on t	his a	count?
	Ц	Yes			
		No	If yes, specify what kind of generator		
С	. Ar	e the	ere any possible generator meter access issu	ues?	
		Yes	s 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	. Ar	e an	y of your accounts on a Demand Response	proai	am?

Laboratories and, where applicable, rules of the California Public Utilities Commission regarding safety and reliability. An Owner with a Renewable Electric Generation Facility that meets those standards and rules shall not

(Qualified Customers are eligible for the same demand response programs and solar tariffs as NEM customers. Demand response payments to Qualified Customers will be based on the Qualified Customer's metered usage disregarding any contributions from virtually net-metered generation. Similarly, any other demand response programmatic elements that are affected by a customer's load (e.g., program eligibility) should also exclude from consideration any impacts of NEMV generation.)  Yes
If yes, what program are you on?
□ No.
E. Generator Interconnection Tie-in Point – Does your interconnection satisfy PG&E's Meter Standards (Appendix C of this Application)?
☐ Yes           ☐ No. Reason:
If after review of a customer's NEMV application PG&E determines a site assessment is essential, then PG&E may conduct a site assessment. Please note that entering PG&E sealed sections of their service panels is unsafe and not permitted without PG&E's supervision and express authorization.
F. Are you planning to meet the requirements specified in the PG&E Greenbook (current reference is "VNEM Installation Requirements, Utility Bulletin TD6999B-005, 02/06/2012)?
☐ Yes           ☐ No. Reason:
G. Where are you planning to tie in? Can you provide Switchgear cutsheets, detailing the proposed point of connection and bussing modification / clearances, cutsheets of the NGOM socket, to clearly identify proposed tie-in point?
Location:
H. Is the currently proposed tie-in point a result of restrictions placed on altering the existing panel or equipment within, as imposed by the local authority having jurisdiction?
Yes - What restriction?
I. Have you confirmed the Ampere Interrupting capacity (AIC) rating of the existing panel?
☐ Yes ☐ No. Reason:
J. Is the account located within a PG&E secondary "network" system?  (Note: PG&E does not allow exporting generators to connect to secondary network systems. Portions of San Francisco and Oakland, where PG&E has a network grid. Customers seeking generator interconnections in San Francisco and Oakland must contact PG&E before beginning any work. See Section II above for more details.)
☐ Yes. ☐ No.
K. Are there existing PG&E gas or other utility's facilities in the vicinity of the proposed point of interconnection? (Note: Minimum clearances must be maintained from PG&E facilities, as specified in PG&E's Greenbook)
Yes - Describe: No.
L. Are you going to require PG&E to arrange to de-energize the service panel for you to safely connect the generator to the service panel?
(Note: that the de-energizing process may be as simple as a PG&E Troubleman opening a switch, or as involved as a PG&E crew performing switching, and rearrangement of service wires, and coordinating with neighboring customers that might be impacted by this de-energizing project. PG&E requires ten (10) business days advance notice prior to performing such a request.)

Yes - Describe:		
☐ No.		
M. Can this de-energizing of the service	e panel be done during normal business	hours?
Yes	pane. 20 acres acres greening.	
	and time of the day do you request this	service disconnection to occur?
— No. ii not, what amo of the wool	tand time of the day do you request time	SOLVING GIGGOTHIGGROTH to Goodi .
Mon Tues Wed Thu Fri	Sat Sun : A (enter time & circ	M / PM
(circle day of week)	(enter time & circ	le AM or PM)
Note: The time of de-energize and their input to the process	ing the service panel will also depend or s.	whether other customers are impacted
N. What is the duration of the service of	isconnection requested?	
Duration		
O. Do you need PG&E personnel to sta	and by while you perform your work?	
☐ Yes		
☐ No		
	om the local authority having jurisdiction p	orior to PG&E re-energizing the service
panel?		
Note: Some cities/counties require that	they have inspected the panel prior to re	eeneraizina. You will need to provide
proof of the local authority that y	our work will not require such approval, o	
prior to PG&E re-energizing the	<u>panel.)</u>	
D vas		
☐ Yes		
<b>山</b> No		
Part IV – Description of the Generating	ng Facilities Use additional she	ets. if necessary
·		
A. AC Disconnect Switch (see Part II, List the AC disconnect switch that wi		iect switches)
	Disconnect Switch Model Number	Disconnect Switch Boting (amno)
Disconnect Switch Manufacturer	Disconnect Switch Model Number	Disconnect Switch Rating (amps)
B. Generating Equipment	reconnected to DC 9 E for this NEMY Arro	naamanti
List all the equipment that will be inte	erconnected to PG&E for this NEMV Arra	ngement.
1. Generation Equipment Detailed D	escription	
	·	
* '	ment - Table B.1 (see row 2 below	w)
1. Biomass	2. Geothermal	3. Municipal Solid Waste
4. Solar Thermal	5. Fuel Cell	6. Landfill Gas
7. Small Hydroelectric Generation	8. Ocean Wave	9. Digester Gas

11. Tidal Current

10. Ocean Thermal

		Generat	ing Equipment D	escription - Table	B.2	
		Generator type	<b>Generator Type</b>	<b>Generator Type</b>	<b>Generator Type</b>	Generator Type
		1	2	3	4	5
а	Is the Generator	New	New	New	New	New
	new or existing	Existing	Existing	Existing	Existing	Existing
b	Number of Type of					
	NEMV generation					
	(from Table B.1)					
С	Please indicate the					
	quantity of each "type" of					
	Generators being					
	installed:					
d	Generator					
<u> </u>	Manufacturer					
е	Generator Model					
Е	Generator Moder					
f	Is the Generator	Yes	Yes	Yes	Yes	Yes
1	CEC certified?	res No	No	res No	res No	No
_						
G	Generator Design	Synchronous	Synchronous	Synchronous	Synchronous	Synchronous
	Design	Induction	Induction	Induction	Induction	Induction
L	Generator Gross	Inverter	Inverter	Inverter	Inverter	Inverter
h	Nameplate					
	Rating					
i	Generator					
•	Operating					
	Voltage					
	Invertor (if any)					
j	Inverter (if any) Manufacturer					
k	Inverter (if any)					
	Model					
I	Is the Inverter (if	Yes	Yes	Yes	Yes	Yes
	any) CEC	No	No	No	No	No
	certified? Inverter (if any)					
m	Gross Nameplate					
	Rating					
n	Inverter (if any)					
••	Generator					
	Operating					
	Voltage					
_	Power Factor					
0	rating					
	(if applicable)					
р	PF Adjustment					
	Range					
•	(if applicable)		İ			1

	Range (if applicable)										
2	2. Generator Acc	ount's otherwise	-applicable rate	e schedule	under	the pro	visions o	f Schedule	NEMV	will	be
	3. If the date of the orior to January 1,		•						erating F	acility	' is
4	4. The expected an	nnual energy prod	uction of the Ge	nerating Fa	cility is _		kWh.				
a	se complete this agre	ement in its entirety					Elec	ctric Sample Nu		ge 8 of n 79-11	

C.	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?
D.	<b>Notices - Mailing Instructions and Assistance:</b> When this Application 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 94177 Pacific Gas and Electric Company Attention: Generation Interconnection Services Mail Code N7L 245 Market St. San Francisco, California 94105
	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 <a href="mailto:gen@pge.com">gen@pge.com</a>
E.	<b>Governing Law</b> This Application 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.
F.	Term of Application  After receipt of all applicable fees, required documents, and this completed Application, this Application shall become effective on the date of PG&E issues the permission to operate letter. This Application 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 NEMV.
G.	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.
	<ul> <li>Appendix A, Appendix B and Appendix C</li> <li>Attached to this Application are:         <ul> <li>Appendix A - Designation of NEMV Generating Account and Benefitting Accounts and their respective Eligible Energy Credit Allocation</li> <li>Appendix B – Owner Affidavit Warranting That NEMV Arrangement Is Sized to Load; and</li> <li>Appendix C – Generator Interconnection Tie-in Point Documentation</li> </ul> </li> </ul>
	Owner Name (Please Print):
	(Signature): Date:

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

Title:

# Appendix A – Designation of NEMV Generating Account and Benefitting Accounts and their respective Eligible Energy Credit Allocation

	respe	Clive Liigible Llielgy	CIEUIL AIIOC	ation	
	Project Identificatio	n Number	(fo	or PG&E's use only)	
<u>Secti</u>	on 1 Instructions				
1)	•	an Renewable Electrical G		information on the associated <i>NE</i> lity of 1 Megawatt or Less for the sa	
Owner	Name	Address		Date	
2)	• •	0	0,	cation for a new NEMV Arrangemen n either NEMV Special Condition 2 o	
	This application is for an allocati	on for the initial, new NEM\	/ Arrangement		
	This application is for a reallocate	tion for an existing NEMV A	rrangement:		
3)	taking service on NEMV. The E	Benefitting Accounts must b	e associated w	Accounts in the Arrangement that will with the same Generator Account and MV Applicability Section to be Eligible	d all

Please note for each row:

- Account Type required the Generator Account row should be completed for the pertinent information for each column indicated; the Benefitting Account rows should be complete for the pertinent information for each column indicated. If there are more Benefitting Accounts than will fit on one page please use additional sheets as required and number pages accordingly.
- Account Address required -- Provide an address, including unit / apartment number, for all Accounts (for the Generator Account you may use the street address of the building upon which the generator will be installed).
- Occupant's / Owner's Name required For the Generator Account enter the Owner's name; for all Benefitting accounts enter the name of the occupant or PG&E customer name for that location.
- PG&E Meter Number required Enter the PG&E Meter Numbers for the all benefitting accounts.
- Otherwise Applicable Rate Schedule required -- Enter the PG&E Otherwise Applicable Rate Schedule (OAS) for the Generator Account and all Benefitting Accounts.
- Eligible Allocation Percentage required -- For each Benefitting Account listed, enter the Eligible Allocation Percentage to two decimal places. The Eligible Energy Allocation Percentage for each Benefitting Account should be established so that the annual kilowatt hours allocated offsets no more than part or all of the customer's own annual electrical requirements. The total of all Benefitting Account Eligible Allocation Percentages in Appendix A for this NEMV Arrangement must equal exactly 100%. If Owner is changing the Eligible Allocation Percentage on an existing NEMV Arrangement, please list all allocations to confirm they add up to 100% and circle the changed allocations.
- **Designated Unallocated Credit Account** "system operator/qualified customer" has the option to designate the disposition of unallocated credits to either: the Common Area Account, or one Benefiting Account. In the NEMV tariff this is referred to as the "Default Account."
- 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 this instruction page.) Also indicate on one of the pages if the
  allocation is for a new Arrangement, or an existing Arrangement.

Section 2 Account

Type

Account

**Address** 

(required field)

	(for Generator Account use street address for building with generator account)	(Generator Accounts should be under the Owner's Name Please use name listed on PG&E Account bill)	(Required field)	Schedule (Required field)	places. The sum of all Benefitting Account Allocation must total 100%. For changes to Existing NEMV Arrangements, list all percentages but circle all changed percentages)	Account (optional – check one Common Area or Benefiting
Generator						
Account						
Benefitting						
Accounts 1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
Project Ide	ntification NumberIs	(for PG&E's use only) this a reallocation of an existing NEMV Arr	Account List - Accoun	Appendix A Ses N	ction 2 Page of	

Occupant's Name,

(Required field)

Number

(Required

PG&E Meter | Otherwise | Eligible Allocation | Designated

Percentage

(required – to 2 decimal

Applicable

Rate

Unallocated

Credit

### Appendix B – Owner Affidavit Warranting That NEMV Arrangement Is Sized to Load

	Project Identification Numl	ber
	<b>,</b>	(for PG&E's use only)
	Address of Generator	
In accordance	with Schedule NEMV, I, Owner warı	rant that:
1)		with this NEMV Application is sized to offset no more than part or all of ents of all the Benefitting Accounts in this NEMV Arrangement, and
2)		established for <u>each</u> Benefitting Account in Appendix A is sized to ne annual usage (kWh) requirement for that specific Benefitting Account.
	Signed,	, Owner, on date:
Owner's Name	(printed)	

### Appendix C – Generator Interconnection Point Documentation

[PG&E to attach current copy or web link providing PG&E's standards and requirements for Virtual Net Metering and PG&E GIS contact information when sending this form to Applicant.]

Applicant attaches the following Documentation:

- the single line diagram to illustrate connection with the selected option provided in the Metering Standard
- the switchgear, switchboard, or main panel cut-sheets/shop drawings detailing the bussing, any modifications, clearances, and proposed point of interconnection. The proposal must include a signed PE stamp and modifications must be certified by the manufacturer or a qualified third party.
- pictures of the point of interconnection (see safety "Note" below.)
- · the meter socket cut-sheets of the net generation output meter socket
- · additional material as specified by PG&E

Note: If after review of a customer's NEMV application PG&E determines a site assessment is needed, then PG&E may conduct a site assessment. Owners are reminded that entering PG&E sealed sections of their service panels is unsafe and not permitted without PG&E's supervision and express authorization.

Cancelling Revis

Revised Revised Cal. P.U.C. Sheet No. Cal. P.U.C. Sheet No.

31572-E 31539-E

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Advice Letter No: Decision No.

3902-E-C E-4481 Issued by **Brian K. Cherry**Vice President
Regulation and Rates

Date Filed Effective Resolution No. May 4, 2012

Pacific Gas and Electric Company
San Francisco, California
U 39

## ELECTRIC TABLE OF CONTENTS RATE SCHEDULES

Cancelling

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#### Rate Schedules Other

S	Standby Service
E OUD	31126, 28245, 30291, 31233*,28401-28404-E
E-CHP	Combined Heat and Power PPA
E-CHPS	Combined Heat and Power Simplified PPA
E-CHPSA	Combined Heat And Power Simplified 500 kW PPA
E-DCG	DCG Departing Customer Generation, CG
	30697,30698,28954,28607,23252,23253,28405,23255-E
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NEMFC	Net Energy Metering Service For Fuel Cell Customer-Generators
	27250,27251,26134,26135,26136,27252-E
NEMBIO	Net Energy Metering Service for Biogas Customer-Generators
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NEMCCSF	Net Energy Metering Service for City and County of San Francisco
NEMV	Virtual Net Metering for a Multi-Tenant or Multi-Meter Property 31546-31568-E (N)
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NEMVMASH	
E-ERA	Energy Rate Adjustments 31377-31380-E
RES-BCT	Schedule for Local Government Renewable Energy
	Self-Generation Bill Credit Transfer30752,30753,29208-29213,30754-E
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Regulation and Rates

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## ELECTRIC TABLE OF CONTENTS SAMPLE FORMS

Sheet 27

FORM TITLE OF SHEET SHEET NO.

### Sample Forms Net Energy Metering

	Net Energy Wetering		
79-854	Interconnection Agreement for Net Energy Metering for Residential and Small Comm Solar or Wind Electric Generating Facilities of 10 kW or Less		
79-978	Interconnection Agreement for Net Energy Metering of Solar or Wind Electric General Facilities 1,000 Kilowatts or less, other than Residential or Small Commercial Facilities 1,000 Kilowatts or less, other than Residential or Small Commercial Facilities 1,000 Kilowatts or less, other than Residential or Small Commercial Facilities 1,000 Kilowatts or less, other than Residential or Small Commercial Facilities 1,000 Kilowatts or less, other than Residential or Small Commercial Facilities 1,000 Kilowatts or less, other than Residential or Small Commercial Facilities 1,000 Kilowatts or less, other than Residential or Small Commercial Facilities 1,000 Kilowatts or less, other than Residential or Small Commercial Facilities 1,000 Kilowatts or less, other than Residential or Small Commercial Facilities 1,000 Kilowatts or less, other than Residential or Small Commercial Facilities 1,000 Kilowatts or less, other than Residential or Small Commercial Facilities 1,000 Kilowatts or less, other than Residential or Small Commercial Facilities 1,000 Kilowatts or less, other than Residential or Small Commercial Facilities 1,000 Kilowatts or less 1,000 Kilowa	ities	
79-994	of 10 kW or LessInterconnection Application for Net Energy Metering (E-NET) for Residential or Small Commercial Customers with Solar or Wind Generating Facilities of 10 Kilowatts	22095-E	
	or Less	25580-E	
79-997	Interconnection Agreement for Net Energy Metering of Qualifying Biogas Digester		
	Generating Facilities		
79-998	Expanded Net Energy Metering (E-Net) Supplemental Application		
79-999	Agreement for Limited Optional Remote Metering Service	20195-E	
79-1010 79-1069	Interconnection Agreement for Net Energy Metering of Fuel Cell Generating Facilities Generating Facility Interconnection Agreement (Eligible/Non-Eligible	328568-E	
	Net Generating Facility Export)	31322-E	
79-1101	Application and Interconnection Agreement for Customers with Solar and/or Wind Electric Generating Facilities of 30 kilowatts or Less	29712-E	
79-1106	PG&E Customer Declaration Regarding Rate E-7/EL-7 Eligibility as a California Ener Commission's New Solar Homes Partnership (NSHP) Rebate Recipient for a Single Custom Home	gy e Family	
79-1109	Net Energy Metering Application and Interconnection Agreement for the Building Owl Multifamily Affordable Solar Housing Facility with a Solar Generating Facility of 1 M	ner of a legawatt or Less	
79-1112	Local Government Application for an LGRR Arrangement to Take Service on Rate Service With Interconnection Eligible Renewable Generation of Not More Than 1	chedule RES-	
	Megawatt	30755-E	
79-1114	NEM 2010 Early True-up Request Form		
79-1124	Eligible Low Income Development Virtual Net Energy Metering Application and Interc Agreement for Multi-Family Affordable Housing with Solar Generation Totaling 1 Mo		
	Less		
79-1125	NEM / NEMVMASH Inspection Report		
79-1123	Customer Request Form not to Receive Net Surplus Compensation	30639-E	
79-1130	Application and Interconnection Agreement for an Eligible	30039-L	(N)
19-1131	Generating Facility of 1MW or Less Serving Multiple Tenants	<b>31569</b> -E	(N)
79-1137	Interconnection Agreement for Net Metering for a Renewable Electrical	31303-∟	(14)
13-1131	Generation Facility of 1,000 Kilowatts or Less	31570-E	(T)
79-1142	Interconnection Application for a Renewable Electrical Generation	31370-	(1) (N)
10-1142	Facility of 1 Megawatt or Less	<b>31571</b> -E	(N)

(Continued)

Advice Letter No: Decision No.

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Regulation and Rates

Date Filed Effective Resolution No. May 4, 2012

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

AT&T

Alcantar & Kahl LLP

Ameresco

Anderson & Poole

**BART** 

Barkovich & Yap, Inc. Bartle Wells Associates

Bloombera

Bloomberg New Energy Finance

**Boston Properties** 

Braun Blaising McLaughlin, P.C.

Brookfield Renewable Power CA Bldg Industry Association

CLECA Law Office CSC Energy Services

California Cotton Ginners & Growers Assn

California Energy Commission
California League of Food Processors
California Public Utilities Commission

Calpine

Cardinal Cogen Casner, Steve

Center for Biological Diversity

Chris, King City of Palo Alto

City of Palo Alto Utilities

City of San Jose City of Santa Rosa Clean Energy Fuels

Coast Economic Consulting

Commercial Energy

Consumer Federation of California

Crossborder Energy Davis Wright Tremaine LLP

Day Carter Murphy

Defense Energy Support Center Department of Water Resources Dept of General Services

Douglass & Liddell Downey & Brand Duke Energy

Economic Sciences Corporation Ellison Schneider & Harris LLP

Foster Farms

G. A. Krause & Assoc. GLJ Publications GenOn Energy, Inc.

Goodin, MacBride, Squeri, Schlotz &

Ritchie

Green Power Institute Hanna & Morton

Hitachi

In House Energy

International Power Technology
Intestate Gas Services, Inc.
Lawrence Berkeley National Lab
Los Angeles Dept of Water & Power
Luce, Forward, Hamilton & Scripps LLP

MAC Lighting Consulting

MBMC, Inc.
MRW & Associates
Manatt Phelps Phillips
Marin Energy Authority
McKenzie & Associates
Merced Irrigation District
Modesto Irrigation District

Morgan Stanley
Morrison & Foerster
Morrison & Foerster LLP
NLine Energy, Inc.
NRG West

NaturEner

**Navigant Consulting** 

Norris & Wong Associates North America Power Partners North Coast SolarResources

Northern California Power Association Occidental Energy Marketing, Inc.

OnGrid Solar Praxair

R. W. Beck & Associates

RCS. Inc.

Recurrent Energy SCD Energy Solutions

SCE SMUD

**SPURR** 

San Francisco Public Utilities Commission

Seattle City Light Sempra Utilities

Sierra Pacific Power Company

Silicon Valley Power Silo Energy LLC

Southern California Edison Company

Spark Energy, L.P.
Sun Light & Power
Sunrun Inc.
Sunshine Design

Sutherland, Asbill & Brennan Tabors Caramanis & Associates

Tecogen, Inc.

Tiger Natural Gas, Inc.

TransCanada

**Turlock Irrigation District** 

United Cogen

**Utility Cost Management** 

**Utility Specialists** 

Verizon

Wellhead Electric Company Western Manufactured Housing Communities Association (WMA)

eMeter Corporation