

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

48598-E

Cal. P.U.C. Sheet No. 48273-E

#### Electric Sample Form No. 79-1109

Sheet 1

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

> **Please Refer to Attached** Sample Form



## **NEMVMASH**



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



**Please note** that this agreement does not constitute an application for **rebate** and/or **incentive programs**. For more information on these programs and their specific applications, please contact PG&E by phone, or by email using the subject "solar energy" at <a href="mailto:smarter-energy@pge.com">smarter-energy@pge.com</a>, 1-800-933-9555 (residential) or <a href="mailto:BusinessCustomerHelp@pge.com">BusinessCustomerHelp@pge.com</a>, 1-800-468-4743 (commercial/industrial).

For more information on the , Multifamily Affordable Solar Housing (MASH) or the New Solar Homes Partnership (NSHP) for affordable housing, please go to <a href="www.pge.com/csi">www.pge.com/csi</a> where you will find information about the program, including the program handbook, reservation request forms with the program contract as well as a list of requirements, FAQ's and resources. For additional questions about the California Solar Initiative (CSI), MASH or the NSHP, contact PG&E at solar@pge.com.

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

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

#### B. Guidelines and Steps for Interconnection

This Application and Agreement must be completed and sent to PG&E along with a completed Supplemental Data Collection Form for Net Energy Metered Generating Facilities to initiate PG&E's interconnection review of the proposed Generating Facility.

<sup>&</sup>lt;sup>1</sup> Formerly referred to as Rate Schedule NEMVNMA – See Advice Letter 3890-E regarding name change. <u>Please complete this agreement in its entirety</u>

<sup>†</sup> Information collected on this form is used in accordance with PG&E's Privacy Policy. The Privacy Policy is available at pge.com/privacy.

	Ci		&E service account	Zip		
			&E service account	1?		
			&E service account	1?		
<u>E.</u>	Owner's Generating Facility	Information - Where will the Ge				
D.						
	Rate Schedules NEMVMASH at: https://www.pge.com/tariffs/assets/pdf/tariffbook/ELEC_SCHEDS_NEMVMASH.pdf and Rate Schedule NEM at: https://www.pge.com/tariffs/assets/pdf/tariffbook/ELEC_SCHEDS_NEM.pdf for more details.					

Customers receiving service on the current NEMVMASH tariff prior to the date that PG&E reaches its NEM Cap or July 1, 2017, whichever is earlier are subject to the NEM Transition Provisions outlined in Rate Schedule NEM. Please see

C. **NEM Transition** 

G. Other Contact Information (This information is optiona	).			
Contact Person		Company N	lame	
Mailir	g Address			
City	Sta	te	Zip	
Business Phone	Fax		Email	
This contact person is to be used as PG&E contact and is authorized by Owner to receive confidential Owner information and act on behalf of Owner with respect to this agreement.				
By checking the boxes above and signing this agreement.	Owner authorizes PG&E	to release inf	formation to the contact(s)	

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

https://www.pge.com/tariffs/assets/pdf/tariffbook/ELEC\_FORMS\_79-1095.pdf

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

#### Part II Selecting the Study Process

Please check one:

☐ Fast Track Process

☐ Detailed Study (not typical)

• Will be either an Independent Study Process, Distribution Group Study Process or Transmission Cluster Study Process, dependent upon the Electrical Independence Tests.

#### Part III Requirements for Interconnection

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

#### **Permission to Interconnect**

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

#### Safe Operation of your Generating Facility

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

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

Applications to interconnect systems located in San Francisco or Oakland may require additional analysis to determine whether or not their proposed installation is on PG&E's networked secondary system. Networked secondary systems are in place to provide heightened levels of reliability in densely populated areas and may affect the ability of PG&E to interconnect NEMVMASH Owner's solar generating 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 Generating Facility. Other approvals and/or other agreements may be needed for special PG&E programs or regulatory agency requirements.

#### **Stale Agreements**

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

#### 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="https://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 a completed Appendix A as well as the Supplemental Data Collection Form (see Part I Section B above). Please note: the Owner's name (as identified in Part I, Section D) must be the same name as on the PG&E bill. In this Agreement, Owner will confirm their otherwise-applicable rate schedule (OAS) for all Common Area accounts in Owner's name as listed in Appendix A Owners who don't specify an OAS for their Common Area accounts will be defaulted to Rate Schedule E-1, establishing how Owner's Common Area Account's monthly usage or net generation will be charged/credited. Owner's-initiated rate changes are governed in accordance with PG&E's Electric Rule 12.
- 2. A single-line diagram showing Owner's actual installation of his/her Generating Facility. The diagram must include the electrical rating and operating voltages of the significant electrical components such as the service panel, the disconnect switch (if required), inverters, all photovoltaic generators, circuit breakers and other protective devices of the Generating Facility, the general location of the Owner's loads relative to the Generating Facility, and the interconnection with PG&E's Distribution System. The diagram must include the following information:
  - a. A description and location of the visible, lockable **AC disconnect switch**.
    - PG&E requires an Owner to install an AC disconnect switch to facilitate maintenance of the Owner's equipment (i.e. inverter, PV arrays, etc.). The AC disconnect switch provides PG&E the ability to isolate the Owner's generator from the NEMVMASH Eligible Low Income Facility and utility's Distribution System.
  - b. A description of the specific **inverter**(s) used to control the interconnection between PG&E and the Generating Facility, including rating, brand name, and model number. Only CEC-certified inverters<sup>2</sup> will pass the

Please complete this agreement in its entirety

<sup>&</sup>lt;sup>2</sup> The CEC's eligible equipment list can be found under the CSI heading at: https://www.energy.ca.gov/programs-and-topics/topics/renewable-energy/solar-equipment-lists

requirements for Simplified Interconnection per PG&E's Electric Rule 21. Non-certified units will require further study and may involve additional costs.

- c. A complete description of the **generating equipment Owner plans to install**. The description must include the photovoltaic panel manufacturer name, model number, number of panels, and the nameplate rating. As with the inverters, only CEC-certified will pass the requirements for Simplified Interconnection. (See the PG&E website <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.
- 3. **Site Diagram** The site diagram must show the building or buildings that will be included as part of the Eligible Low Income Housing that meets the applicable Service Delivery Point requirements if any, in the Applicability Section of NEMVMASH, the meter locations, and denote where the PV solar generating facility will be located and interconnected.
- 4. Information regarding any existing **insurance coverage** (liability and/or property) for the Schedule NEMVMASH Generating Facility location –

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

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

	I have insurance. I hereby certify that there is presently insurance coverage in the amount of \$ for the Schedule NEMVMASH Generating Facility location.				
Insuring Company's Name:Insurance Policy #					
	I <b>do not</b> have insurance. I hereby certify that there is presently \$0 (zero) dollars of insurance for the Schedule NEMVMASH 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.

#### **Internet Agreement Forms**

If this Agreement has been completed electronically, it may be submitted to PG&E via e-mail or through PG&E's online portal when it becomes available. Copies or forms requiring a signature, attachments or any applicable fees described in Part II must be e-mailed to PG&E at the address noted in Part V Section F, "Notices".

Part IV General Facility
A. Expected date of Project Completion and PG&E Receipt of Final, Signed-Off Building Permit for Generating Facility?
Date:
B. Are there any other generators interconnected on this account?

Yes  If yes, specify what kind of g	enerator				
□ No					
Yes <b>If yes</b> , check all that apply:					
☐ Locked Room/Gate		☐ Meter located inside	e of facility/residence		
Unrestrained animal at me disconnect switch location		Other (Please explai	n)		
No					
			_		
Yes					
If yes, what program are you	ı on?	<del></del>			
	F's demand res	nonse nrograms see: www	/ pge com/demandresponse )		
(For more information on PG&E's demand response programs see: <a href="www.pge.com/demandresponse">www.pge.com/demandresponse</a> )					
Part V Description of the Generation	ng Facilities	Use additional shee	ets, if necessary.		
. 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 Sv	witch Model Number	Disconnect Switch Rating (amps)		
			<u> </u>		

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

List 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 G.1.m.) 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.	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?

What is the maximum 3-phase fault current that will be contributed by the Generating Facility to a 3-phase fault at the
Point of Common Coupling (PCC)? (If the Generating Facility is single phase in design, please provide the contribution

for a line-to-line fault).		Amps		

#### F. Notices - Mailing Instructions and Assistance:

E. Maximum 3-Phase Fault Current Contribution

When this agreement has been completed it should be e-mailed, along with the required attachments, to the email address below. Any applicable fee payments shall be mailed to:

Payment USPS Mail	Payment Overnight Mail
USPS Mail:	Overnight Mail:
PG&E CFM/PPC Department	PG&E Customer Fund Management
P.O. Box 997340	Payment Processing Center
Sacramento, CA 95899-7340	885 Embarcadero Drive
	West Sacramento, CA 95605

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 NEMVGen@pge.com

#### 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		
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<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.

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 NEMVMASH.

#### 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

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

Owner Name (Please Print):		
(Signature):		Date:
Title:	·	

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

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

	<u>.</u>			
	Project Identification	n Number(fo	or PG&E's use only)	
<u>Sectio</u>	on 1 Instructions			
	Energy Metering Application and Housing with a Solar Generating Facility.	is information must match the Owner in and Interconnection Agreement for the B g Facility of 1 Megawatt or Less for the	Building Owner of Multifamily Affordable	
Owne	r Name	Address	Date	
2)	Is this application for a new NEMVMASH Eligible Low Income Facility or a reallocation for an existing NEMVMASH facility? (Existing NEMVMASH facility Owners may not reallocate the Solar Allocation Percentages for all Common Area Accounts and all Residential Unit Accounts for a period of 5 years after first being interconnected on NEMVMASH, even if there is a change in Owner. However, after 5 years a reallocation may be requested. Also, a reallocation of credits between the different Common Area Accounts is allowed, and similarly if a residential unit becomes uninhabitable under the terms described in the NEMVMASH tariff in Special Condition 2 g, the Owner may choose to reallocate credits to the other Residential Unit Accounts).			
	This application is for an allocation for the initial new NEMVMASH Eligible Low Income Facility: $lacksquare$			
	This application is for a reallocat	tion for an existing NEMVMASH Eligible L	.ow Income Facility:	
3)		Low Income Facility, if you applied for the percentages in the space provided bel		
	Allocation Percentage for All mon Area Account(s) Listed in	Solar Allocation Percentage for All Residential Unit Accounts Listed in	Both Percentages Must Total 100%	

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

4) Please use the attached Appendix A, Section 2 page to list all accounts that are located in the Eligible Low Income Facility that will be taking service on NEMVMASH. Alternatively, an Applicant may complete the table below in a digital format (i.e. spreadsheet) and supply that along with the application and agreement to NEMVGen@pge.com. Include the Generator Account, all Common Area Accounts (if any) and all Residential Unit Accounts. The Common Area and Residential Unit Accounts must be associated with the same Generator Account and all must satisfy the applicable Service Delivery Point requirements if any, in the NEMVMASH Applicability Section to be Eligible for Schedule NEMVMASH.

Please note for each row:

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

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

5)	If the Eligible Low Income Facility has been on the MASH program for less than 5 years, verify that: (for all pages included).		
	Total of Solar Allocation Percentages for all the Common Area Accounts (if any)		
	Total of Solar Allocation Percentage for all the Residential Unit Accounts		

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

Section 2

#	# Account Type Check only one box for each row (required field)		oox for each	Account Address (required field)	For Residential Units, Last <b>Name</b> of Occupant, if known	(Required field for Common Area Accounts and Generator	(Required field for Common Area Accounts and Generator Account	(Required Field for Common Are Accounts and Residential Accounts)
	Common Area	Residential Unit	Generator Account (only 1)	(for Generator Account use address of nearest common area account)	For Common Area and Generator Accounts, Owner's Name (Name on PG&E Account)	PG&E	only) Otherwise Applicable Rate Schedule (OAS) under NEMVMASH	Solar Energy Allocation Percentage
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
					Total Sc	olar Energy Allocation	Percentage for this page	)
		Pr	oject Identific	ation Number Section 2 Page	(for PG&E's use or	nly) Acco	unt List - Appendix A,	