

Docket No.: R.20-08-020

Exhibit No.: IOU-06

Date: July 28, 2021

Witness: Cross Exhibit for A.Detrio, Ivy Energy

**EXHIBIT IOU-06  
PG&E Electric Schedule  
NEM2 tariff**



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 1

APPLICABILITY: This net energy-metering schedule pursuant to Decision (D.) 16-01-044 is applicable to a customer who takes service on an applicable time-of-use (TOU) rate schedule<sup>1,2</sup> and who uses a Renewable Electrical Generation Facility (REGF) as defined below that is located on the customer's owned, leased, or rented premises, is interconnected and operates in parallel with PG&E's transmission and distribution systems, and is intended primarily to offset part or all of the customer's own electrical requirements (hereinafter "eligible customer-generator" or "customer"). For a NEM REGF paired with storage, see Special Condition 9.

(T)

Notwithstanding the definition of "eligible customer-generator" above, eligible customer generator also includes (i) the California Department of Corrections and Rehabilitation (CDCR) pursuant to Special Condition 7 of this tariff.

(D)  
(D)  
(D)

Subject to the requirements of Special Condition 6, Load Aggregation to determine the customer's own electrical requirements is permitted. Certain incremental billing and metering costs set forth in this schedule that are related to net energy metering are applicable to Electric Service Providers (ESPs) serving eligible customer-generators.

This service is not applicable to a Direct Access (DA) customer where the customer's ESP does not offer a net energy metering tariff. In addition, if the tariffs for the customer's ESP do not permit Load Aggregation, as described in Special Condition 6, this option is not available to the DA customer. In addition, if an eligible customer-generator participates in direct transactions with an ESP that does not provide distribution service for the direct transactions, the ESP, and not PG&E, is obligated to provide net energy metering to the customer.

This rate schedule is available to customers that provide PG&E with:

- (a) a completed, signed Net Energy Metering Application and Interconnection Agreement as described in Special Condition 3 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 REGF,

See Special Condition 8 for NEM2 Grandfathering Provisions.

(T)

<sup>1</sup> Customers on Schedules such as ET, ES, and ESR, which have no corresponding TOU Rate, are not required to switch to TOU rates, unless and until such a rate becomes available.

<sup>2</sup> Customers, including those on Load Accounts on NEMA as described in Special Condition 6, switching from Schedule NEM to this NEM2 successor tariff are required to take any applicable TOU rate, beginning at the time the customer switches to the NEM successor tariff, pursuant to D.14-03-041 and D. 16-01-044.

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 2

**APPLICABILITY:** Customers seeking generator interconnections in portions of San Francisco and Oakland where PG&E has a network grid must contact PG&E about generation export limitations.  
(Cont'd.)

A REGF means a generating facility that generates electricity by using:

- 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 REGF 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 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>3</sup>

<sup>3</sup> The RPS Guidebooks can be found at: <https://www.energy.ca.gov/programs-and-topics/programs/renewables-portfolio-standard>

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(T)

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 3

APPLICABILITY:  
(Cont'd.)

Schedule NEM2 applies also to specified net energy metering eligible (NEM2-eligible) generators in a REGF comprised of multiple NEM2- and non-NEM2-eligible generators, served through the same Point of Common Coupling (PCC), where the NEM2-eligible generating capacity sized to customer load and in the case of the CDCR, for CDCR accounts also satisfies Special Condition 7, respectively. Such facilities will be referred to as Multiple Tariff Facilities, and any group of generators within such a facility that is subject to the same tariff provisions for billing and metering purposes will be referred to as a Constituent Generator Group. In order to be eligible for this rate schedule in a Multiple Tariff Facility, the customer-generator must meet all the requirements of Special Condition 4 for the schedule NEM2-eligible generator, and must also meet any other applicable tariffs.

(T)

Due to the complexity of Load Aggregation Arrangements and/or Multiple Tariff Facilities NEM2 generating facilities interconnecting under the provisions of Special Conditions 4 and 6 may require additional review and/or interconnection facilities and other equipment, and may incur interconnection costs, as provided for in electric Rule 21.

All Customers with Renewable Electrical Generation Facilities larger than 1 MW are subject to interconnection, Network and/or Distribution upgrade costs in accordance with Rule 21.

**Change of Party for 30 kW or less:** A Customer who owns, rents or leases a premises that includes solar and/or wind turbine electrical generating facilities, or a hybrid of both with a capacity of 30kW or less, that were previously approved by PG&E for NEM2 interconnection prior to the Customer moving in and/or taking electric service with PG&E (Change of party Customer) will take service on this tariff (or other appropriate tariffs as determined by the Commission) as long as the requirements of this section are met. To be eligible, the Change of party Customer must: 1) ensure that the generating facility is compliant with all applicable safety and performance standards as delineated in PG&E's Electric Rule 21 and other applicable tariffs; 2) understand that PG&E may from time to time release to the California Energy Commission and/or the California Public Utilities Commission, information regarding the Change of party Customer's facility, including Change of party Customer's name and REGF location, capacity and operational characteristics. Any type of REGF other than a solar and/or wind turbine electrical generating facilities, or a hybrid of both with a capacity of 30kW or less, may at PG&E's request be required to complete and submit to PG&E a new NEM2MT Interconnection Agreement as indicated in Special Condition 3 and/or Affidavit (Appendix C).

Change of party Customers with solar and/or wind turbine electrical generating facilities up to 30 kW making any modification are not eligible for this provision. These generators and solar and/or wind electric generating facilities over 30 kW and all other REGF are not eligible for this provision and must complete the interconnection process in Special Condition 3 of this tariff.

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 4

APPLICABILITY: Change of party Customers also must agree to comply with all rules and requirements of this and other applicable tariffs. (N)

When the builder/developer of a subdivision sells a new home during the NEM2 application process, after the builder/developer completes the Net Energy Metering Application and Interconnection Agreement and otherwise meets all of PG&E's requirements for the NEM2 project, but prior to PG&E providing final written approval for Parallel Operation on Schedule NEM2, PG&E may treat the new home owner/Customer as a Change of-party Customer, as defined above

**Demand Response Programs:** For Load Aggregation pursuant to Special Condition 6, Aggregated Accounts, including the Generating Account, are eligible for the same demand response programs and solar tariffs as NEM2 customers. Demand response payments to Aggregated Accounts will be based on the Qualified Customer's metered usage disregarding any contributions allocated from the Generating Account. Similarly, any other demand response programmatic elements that are affected by a customer's load (e.g., program eligibility) shall also exclude from consideration any impacts of Generator Account generation. Any payments for demand response will be limited to the customer's load, and not include excess generation exported to the grid.

TERRITORY: The entire territory served.

RATES: All rates charged under this schedule will be in accordance with the eligible customer-generator's PG&E otherwise-applicable metered rate schedule (OAS). An eligible customer-generator 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. The "Average Rate Limiter" for general service OAS's and all other demand charges will be based on the demand in kilowatts as measured only on the energy being consumed by the customer from PG&E. The power factor, when it applies on the OAS, will be based on the energy consumed by the customer-generator from PG&E and the average power factor over the past 12 billing months of operation prior to starting on NEM2. Customer-generators without 12 billing months of power factor history, will have their power factor estimated based on the nature of the connected facilities and their hours of operation. Power factor will be subsequently applied to the customer-generator's bill until the customer-generator 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 customer-generator's bills. Charges for energy (kWh) supplied by PG&E, ESP or Community Choice Aggregator (CCA), as applicable, will be calculated in accordance with Billing (Special Condition 2, below).

For PG&E customer-generators, the energy charges will be in accordance with the customer-generator's OAS. For ESP or CCA customer-generators being billed Consolidated PG&E Billing service, 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. (N)

(Continued)

Advice	4980-E	Issued by	Date Filed	December 16, 2016
Decision	16-01-044	<b>Steven Malnight</b>	Effective	December 16, 2016
		Senior Vice President	Resolution	
		Regulatory Affairs		



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 5

RATES:  
(Cont'd.)

Customer-generators eligible for service under this schedule are exempt from the requirements of Schedule S—Standby Service except Multiple Tariff Facilities interconnected under the terms of Special Condition 4, may be subject to the requirements of Schedule S.

The charges and credits for Multiple Tariff Facilities taking service on this rate schedule under the provisions of Special Condition 4, will be calculated using the applicable OAS identified by the customer-generator in its application for interconnection and its interconnection agreement with PG&E or as subsequently changed by the customer-generator in accordance with PG&E's electric Rule 12.

Existing customer-generators being billed under sub-schedules NEM2S, NEM2EXP, NEM2EXPM, or NEM2A who only add storage and are eligible to use the estimation methodology described in Special Condition 9 ("NEM Paired Storage") will be billed using the estimation methodology as of their scheduled True-Up, provided that a True-Up is not required for any other reason. All other customer-generators with Multiple Tariff Facilities or NEM Paired Storage with existing NEM2 eligible generators or storage interconnecting additional generators, will receive a bill true-up prior to taking service under Special Condition 4. This ensures that all NEM2 accounts have the same Relevant Period, as defined in Special Condition 2, going forward.

Residential Customers on this tariff, who are: (T)

i. the first customer who installs the REGF (that is, second or subsequent owners are not eligible) and (N)

ii. required to take TOU rates prior to the implementation of default TOU rates for all residential customers, and

iii. on any TOU rate (including a TOU pilot rate) prior to the implementation of default residential TOU rates, (N)

have the option to stay on that TOU rate for a period of five years from the date the customer commences the TOU rate. (T)

PG&E rates and rate design, including the rates and rate design reflected in this Tariff, are subject to change from time to time. Customers should take this into consideration when making any long term decisions based on rate structures that are currently in place.

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 6

**SUB-SCHEDULES:**

Eligible customer-generators will be placed on the appropriate sub-schedule as described below:

1. NEM2S – For Small Customer (as defined in Rule 1) customer-generators taking service with solar and/or wind generating facilities of 30 kilowatts or less.
2. NEM2EXP – For Small Customer (as defined in Rule 1) customer-generators with (i) solar and/or wind generating facilities of 1,000 kilowatts or less, other than facilities of 30 kilowatts or less, or (ii) any other REGF of 1,000 kilowatts or less.
3. NEM2EXPM – For all other commercial, industrial customer-generators, and agricultural customers billed monthly under Special Condition 2.
4. NEM2MT – For customer-generators taking service as a Multiple Tariff Facility under Special Condition 4 of this tariff.
5. NEM2A – For a customer-generator with a Load Aggregation Arrangement pursuant to Special Condition 6 of this tariff.
6. NEM2CDCR – For a CDCR customer-generator pursuant to Special Condition 7.

(D)  
(D)

**SPECIAL CONDITIONS:**

1. METERING: Multiple Tariff Facilities will be metered under one of the options described in Special Condition 4. All other net energy metering shall be accomplished using a single meter capable of separately registering the flow of electricity in two directions (imports and exports). If the eligible customer-generator's existing electrical meter is not capable of separately measuring the flow of electricity in two directions, the eligible customer-generator shall be responsible for all expenses involved in purchasing and installing a meter that is able to separately measure electricity flow in two directions (imports and exports).

If none of the normal metering options available at PG&E's disposal which are necessary to render accurate billing are acceptable to the customer-generator, PG&E shall have the right to refuse interconnection. As an alternative, PG&E shall have the option to provide an estimation methodology for such customers.

Customer-generators with Load Aggregation Arrangements will need metering on the Generating Account capable of separately measuring imports and exports in a manner commensurate with the smallest time interval used by PG&E to establish billing determinates for any of the Aggregated Account meters. If a newly installed REGF can use the existing metering, the metering charges will be based on applicable meter charges in the Generating Account TOU OAS; if a new meter is requested by the customer for a new service as allowed in Special Condition 3, it must be installed at the customer's expense as a Special Facility using incremental costs, pursuant to Section I, Electric Rule 2.

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**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 7

SPECIAL  
CONDITIONS:  
(Cont'd.)

1. METERING: (Cont'd.)

For each Aggregated Account other than the Generating Account, an appropriate load account meter is required, consistent with the TOU rate schedule for that account, and customer is responsible for all metering charges provided for in each Aggregated Account's OAS.

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(D)

Additional metering requirements for NEM Paired Storage are described in Special Condition 9.

(T)

2. BILLING: Facilities qualifying under Multiple Tariffs Facilities, see Special Condition 4.

For customer-generators taking service on OAS's, any net monthly consumption or production shall be valued as follows:

a. For an OAS with Baseline Rates

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

If the eligible customer-generator is a net consumer, the eligible customer-generator will be billed in accordance with the eligible customer-generator's OAS except for the non-bypassable charge (NBC) calculation addressed in 2.c. For NEM Paired Storage, net generation will be calculated as described in Special Condition 9, Section g. as applicable.

If the eligible customer-generator is a net generator, the net kWh generated shall be valued at the rate for the kWh up to the baseline quantity, with any excess kWh generated, valued at the rate for the appropriate tier level in which the equivalent kWh of usage would fall. These credits, if any, do not reduce the charges from the NBC calculation addressed in 2.c.

If the eligible customer-generator is being served under DA or CCA Service, ESP or CCA charges will be specified by their ESP or CCA in accordance with the eligible customer-generator's OAS and PG&E's Direct Access or Community Choice Aggregation tariffs. Applicable PG&E charges or credits will be valued as described in this Special Condition 2.

For a DA or CCA Service customer-generator, Generation Rate Component credits, if any, do not reduce the charges owed to PG&E for energy supplied to the eligible customer-generator, nor do they reduce the NBC calculation in 2.c.

(Continued)





**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 8

SPECIAL  
CONDITIONS:  
(Cont'd.)

2. BILLING: (Cont'd.)

b. For an OAS with Time of Use (TOU):

If the eligible customer-generator is a net consumer during any discrete TOU period, the net kWh consumed shall be billed in accordance with that same TOU period in the eligible customer-generator's OAS except for the NBC calculation addressed in 2.c.

If the eligible customer-generator is a net generator during any discrete TOU period, the net kWh produced shall be valued at the same price per kWh at the same TOU period in the eligible customer generator's OAS. For NEM Paired Storage, net generation will be calculated as described in Special Condition 9, Section g. as applicable. (T)

In the event that at the end of the monthly billing cycle, an eligible customer-generator's net usage for all TOU periods totals zero (i.e. net generation in one or more periods exactly offsets the net usage in all other periods) except for the NBC calculation addressed in 2.c, then the value of usage and/or generation will be calculated using Tier 1 rates (as set forth in the OAS).

If the eligible customer-generator is being served under DA or CCA Service, ESP or CCA charges will be specified by their ESP or CCA in accordance with the eligible customer-generator's OAS and PG&E's Direct Access or Community Choice Aggregation tariffs. Applicable PG&E charges or credits will be valued as described in this Special Condition 2.

For a DA or CCA Service customer-generator, Generation Rate Component credits, if any, do not reduce the charges owed to PG&E for energy supplied to the eligible customer-generator including the NBC calculation addressed in 2.c.

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 9

SPECIAL  
CONDITIONS:  
(Cont'd.)

2. NET ENERGY METERING AND BILLING: (Cont'd.)

c. Non-Bypassable Charges

Customers on this tariff must pay the non-bypassable charges specified in D.16-01-044 and Resolution E-4792 in each metered interval for each kilowatt-hour of electricity they consume from the grid. The relevant non-bypassable charges are Public Purpose Program, Nuclear Decommissioning Charge, Competition Transition Charge, and Wildfire Fund Charge (NBCs). These charges may not be reduced by any credits for exports to the grid as calculated in 2.a and 2.b. NBCs shall be assessed only on the kilowatt hours consumed in each metered interval net of exports.

(T)

d. For an OAS with Minimum Charges:

Eligible customer-generators taking service on a residential OAS, that are billed annually for net energy consumed, shall owe only the delivery minimum bill amount monthly, which shall be assigned as distribution revenue. The energy (kWh) related component shall be treated in the same manner as energy (kWh) consumed, as described in Special Condition 2.h below, unless otherwise provided for in the customer-generator's OAS.

e. For a customer-generator electing Load Aggregation:

For each monthly billing period, the energy (kWh) exported to the grid (in kilowatt-hours or kWh) by the Renewable Electrical Generation Facility shall be allocated to each of the Aggregated Account meters (kWh reading), as well as the Generating Account if it has load, based on the cumulative usage at each aggregated account and the cumulative generation from the generating account from the start of the Relevant Period. At the end of the month, once the allocation proportions are known, the kWh for each Generating Account meter interval will be allocated to each of the Aggregated Accounts for the corresponding interval. NBCs will apply to the load accounts based on their full metered usage.

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 10

SPECIAL  
CONDITIONS:  
(Cont'd.)

2. NET ENERGY METERING AND BILLING: (Cont'd.)

- e. For a customer-generator electing Load Aggregation: (Cont'd) (T)

Once the kWh is allocated to an eligible customer-generator's Aggregated Account, that account will be treated in accordance with 2.a, 2.b, and/or 2.c above, as applies to the rate schedule on which the Aggregated Account takes service. The Generating Account will also be treated as an Aggregated Account in months where it has net load.

- f. Payment Options: (T)

Eligible Small Customer (as defined in Rule 1) customer generators may pay monthly or annually for the net energy (kWh) consumed. For all other commercial, industrial, and agricultural customers, the net balance of all moneys owed must be paid on each monthly billing cycle; when they are a net electricity producer over a monthly billing cycle, the value of any excess kilowatt-hours generated during the billing cycle shall be carried over to the following billing period and appear as a credit on the customer generator's account, until the end of the Relevant Period.

Aggregated Accounts, including the Generating Account in a Load Aggregation Arrangement must pay monthly for energy consumed.

- g. Relevant Period: (T)

A Relevant Period consists of any twelve monthly billing cycles commencing on the date PG&E provides the Customer-Generator with PG&E's written approval to begin parallel operation of the REGF for purposes of participating in NEM2, and on every subsequent anniversary thereof. If an eligible customer-generator terminates service, or experiences a change in ESP or CCA prior to the end of any 12 monthly billing cycles the Relevant Period will consist of that period from the anniversary date until the effective date of that termination or ESP or CCA change.

For Load Aggregation, the Generating Account and all Aggregated Accounts will have the same billing cycle and Relevant Period, based on the interconnection date, or Anniversary thereof as described earlier in this paragraph. However, if an Aggregated Account terminates service, or experiences a change in ESP or CCA prior to the end of any 12 monthly billing cycles, its Relevant Period will consist of that period from the anniversary date until the effective date of that termination or ESP or CCA change. If an Aggregated Account is subsequently added, its Relevant Period will consist of that period from its effective date of inclusion in Load.

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 11

SPECIAL  
CONDITIONS:  
(Cont'd.)

2. NET ENERGY METERING AND BILLING: (Cont'd.)

h. Energy True Up:

(T)

Net energy is defined as measuring the difference between the energy (kWh) supplied by PG&E, ESP or CCA, as applicable, through the electric grid to the eligible customer-generator and energy (kWh) generated by an eligible customer-generator and fed back into the electric grid over a Relevant Period.

For an Aggregated Account, (including a Generating Account) Net Energy is defined as measuring the difference between the energy (kWh) supplied by PG&E, ESP or CCA, as applicable, through the electric grid to the eligible customer-generator and the total energy (kWh) allocated to that Aggregated Account over a Relevant Period.

(D)  
(D)

A true up is performed by PG&E and/or ESP or CCA, as applicable, at the end of each Relevant Period following the date the customer-generator was first eligible for Schedule NEM2, or the date of PG&E's written approval to begin parallel operation of the REGF for purposes of participating in NEM2, whichever is later, and at each anniversary date thereafter. The eligible customer-generator shall be billed as follows:

Where the residential delivery minimum bill amount applies at the true up for a Bundled, DA/CCA, or Transitional Bundled Service customer, the customer generator will not owe any additional amounts for delivery services. The total delivery minimum bill amount will be unbundled for accounting purposes based on net energy consumed over the relevant period using non-generation rates described in the otherwise applicable rate schedule, except for NBC's which will be unbundled for accounting purposes based on total energy consumed from the grid.

Where the residential delivery minimum bill amount applies at the true up for a Bundled or Transitional Bundled Service customer, and the accumulated net generation charges over the relevant period are greater than zero, the customer-generator will also owe an amount equal to the accumulated net generation charges. Where the residential delivery minimum bill amount applies at true up for a Bundled or Transitional Bundled Service customer, and the accumulated net generation charges over the relevant period are less than or equal to zero, no credit for accumulated net generation charges will be applied to the amount owed by the customer-generator.

If the customer-generator 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.

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 12

SPECIAL  
CONDITIONS:  
(Cont'd.)

h. Energy True Up: (Cont'd.) (T)

For a DA or CCA Service customer-generator, Generation Rate Component credits, if any, do not reduce the charges owed to PG&E for energy supplied to the eligible customer-generator including NBCs calculated in 2.c.

If any Eligible customer-generator has any credits calculated pursuant to this Special Condition 2 remaining at the end of the Relevant Period, that credit will be set to zero. However, in the event the energy (kWh) generated exceeds the energy (kWh) consumed during the Relevant Period, compensation shall be made for the excess energy (kWh) as described and allowed for in Special Condition 5.

Once the true-up is completed at the end of the Relevant Period, any overpayment for energy (kWh) from the true-up will be credited to future bill charges.

i. Billing Information: (T)

If PG&E supplies the eligible customer-generator with energy (kWh), PG&E shall provide the eligible customer-generator with 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 last Relevant Period ended.

j. Electric Service Provider (ESP) Charges: (T)

If PG&E provides direct access (DA) metering for the ESP, consolidated UDC billing (that is, Consolidated PG&E Billing as described on PG&E's Rule 22), Separate or Consolidated ESP Billing support services for DA customer-generators 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 described in Schedule E-ESP – Services To Electric Service Providers, and Schedule E-EUS – End User Service.

All accounts in a Load Aggregation Arrangement, including the Generating Account and all of its Aggregated Accounts, will normally all take service either only from PG&E, a single ESP or a single CCA. However, if PG&E is the billing agent, a mixture of electric commodity service providers may be permitted as long as PG&E agrees and recovers the additional incremental costs related to billing this Load Aggregation Arrangement from the customer's ESP and/or CCA based on the applicable rates in Schedules E ESP and E-CCA.

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 13

SPECIAL  
CONDITIONS:  
(Cont'd.)

3. INTERCONNECTION: Prior to receiving approval for Parallel Operation, the customer-generator must submit a completed PG&E application form and interconnection agreement as follows:

Rate Option	Application	Interconnection Agreement	
NEM2S	For Solar and/or Wind Electric Generating Facilities of 30 Kilowatts or Less:  <i>Application - Net Energy Metering (NEM2) Interconnection for Solar and/or Wind Electric Generating Facilities of 30 Kilowatts or Less (Form 79-1151B-02)<sup>4</sup></i>	<i>Agreement and Customer Authorization – Net Energy Metering (NEM2) Interconnection for Solar and/or Wind Electric Generating Facilities of 30 Kilowatts or Less (Form 79-1151A-02)<sup>4</sup></i>	(T) (T)
NEM2EXP NEM2EXPM	For Solar and/or Wind Net Energy Metering (NEM2) Generating Facilities of 1,000 Kilowatts or Less, other than Facilities of 30 Kilowatts or Less:  <i>Generating Facility Interconnection Application, (Form 79-1174-02)</i>	<i>Interconnection Agreement for Net Energy Metering (NEM2) of Solar or Wind Electric Generating Facilities of 1,000 Kilowatts or Less, other than Facilities of 30 Kilowatts or Less (Form 79-978-02)</i>	
	For Net Energy Metering (NEM2) non-Solar and/or Wind Generating Facilities of any size, and Solar and/or Wind Generating Facilities greater than 1,000 kW:  <i>Generating Facility Interconnection Application, (Form 79-1174-02)</i>	<i>Interconnection Agreement For Net Energy Metering (NEM2) non-Solar and/or Wind Generating Facilities of any size, and Solar and/or Wind Generating Facilities greater than 1,000 kW (Form 79-1137-02)</i>	

<sup>4</sup> Both the Agreement and Customer Authorization (79-1151A-02) and Application (79-1151B-02) forms must have been submitted before PG&E will issue the Permission to Operation (PTO) letter. Information in the Application can be submitted by the Company or Customer in an electronic format, subject to approval by PG&E. (T)

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 14

SPECIAL  
CONDITIONS:  
(Cont'd.)

3. INTERCONNECTION: (Cont'd.)

Rate Option	Application	Interconnection Agreement	
NEMPS	For NEMPS (Special Condition 9) for projects that meet NEM integrity requirements		(N)
	<i>Generating Facility Interconnection Application, (Form 79 1174-02)</i>	<b>79-1193-02- AGREEMENT AND CUSTOMER AUTHORIZATION Net Energy Metering (NEM2) Interconnection For Solar And/Or Wind Electric Generating Facilities Of 30 Kilowatts Or Less with Energy Storage of 10 Kilowatts Or Less or Energy Storage with Power Control System Certification</b>	(N)
NEM2, NEM2EXP, NEM2A ,or NEM2MT > 1,000 kW	<i>Generating Facility Interconnection Application (Form 79-1174-02)</i>	<i>Rule 21 Generator Interconnection Agreement for New Energy Metering (NEM-2) Generating Facilities Greater than 1,000 Kilowatts Interconnecting Under the Fast Track Process (Form 79-1144-02)</i>  <i>Rule 21 Generator Interconnection Agreement (GIA) for Net Energy Metering (NEM2) Generating Facilities Greater than 1,000 Kilowatts Interconnecting Under the Independent Study, Distribution Study, or Transmission Cluster Process (Form 79-1161-02)</i>	
NEM2MT	For customer-generators ≤ 1 MW taking service as a Multiple Tariff Facility under Special Condition 4 of this tariff:		
	<i>Generating Facility Interconnection Application (Form 79-1174-02)</i>	<i>Generating Facility Interconnection Agreement (NEM2MT - Multiple Tariff) (Form 79-1069-02)</i>	
NEM2A	NEM2 Load Aggregation ≤ 1 MW		
	Along with the applicable interconnection form above, also submit:  <i>NEM2 Load Aggregation Appendix (Form 79-1202)</i>		
NEM2CDCR	See Special Condition 7		

(Continued)





**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 15

SPECIAL  
CONDITIONS:  
(Cont'd.)

3. INTERCONNECTION: (Cont'd.)

For Load Aggregation, a completed and signed "NEM Load Aggregation Appendix" (Form 79-1202) must be submitted together with the appropriate NEM interconnection agreement listed above. (T)

The eligible customer-generator must meet all applicable safety, and performance standards established by the National Electrical Code, the Institute of Electrical and Electronics Engineers, and accredited testing laboratories such as Underwriters Laboratories and, where applicable, rules of the California Public Utilities Commission regarding safety and reliability.

In order to promote the safety and reliability of the customer REGF, the applicant is required to verify as a part of each interconnection request for this tariff, that all major solar system components are on the verified equipment list maintained by the California Energy Commission and other equipment, as determined by PG&E, should be verified by the customer as having safety certification from a nationally recognized testing laboratory.

Applicant is required to verify as a part of each interconnection request for this tariff, that (i) a warranty of at least 10 years, or (ii) a 10-year service warranty or executed "agreement" ensuring proper maintenance and continued system performance has been provided on all equipment and on its installation.

For Load Aggregation Arrangements Requesting an additional service for Generator – Subject to all other applicable rules, an additional service may be allowed for the Generating Account if it has no load other than that associated directly with the REGF. However, a customer may not subsequently add load to that additional service, and if the REGF is removed, the additional service, may not be converted to a load account.

Customers on this tariff must pay for the interconnection of their REGF as provided in Electric Rule 21, including an application fee. This application fee must be paid through PG&E's online application portal in order to complete the application, unless otherwise directed by PG&E. For application fees for Customers impacted by a Natural or Man-Made Disasters<sup>5</sup>, see Special Condition 10.

For the purposes of the NEM2, NEM2V, and NEM2VMSH tariffs, the rating of the generating facility, for the purposes of comparing its size relative to the 1 megawatt (MW) limit, will be determined based on:

- (a) For each PV generator, the California Energy Commission's (CEC) AC rating;
- (b) For each inverter based generator, the gross nameplate rating of the inverter; or
- (c) For each non-inverter based generator, the generator gross nameplate.

<sup>5</sup> Natural or man-made disasters includes such events as a fire, earthquake, flood, or severe storms.

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 16

SPECIAL  
CONDITIONS:  
(Cont'd.)

4. MULTIPLE TARIFF FACILITIES:

(N)

Multiple Tariff Facilities have the following additional provisions:

- a. When Net Generation Output Metering (NGOM) is required, such NGOM must conform to the requirements set forth in Electric Rule 21, Section J.
- b. A NEM2-eligible Constituent Generator Group is defined as a constituent generator group that is eligible for service under the provisions of either schedule NEM, NEM2, NEMBIO or NEMFC or their sub-schedules.
- c. A non-NEM2-eligible Constituent Generator Group is defined as a constituent generator group that does not take service under the provisions of schedule NEM, NEM2, NEMBIO or NEMFC, but interconnects under the non-NEM2 provisions of Electric Rule 21.
- d. All metering for Multiple Tariff Facilities called for in this Special Condition must meet the requirements needed to bill under the customer-generator's OAS. All metering, equipment and Non Export relays necessary to implement the provisions in this section will be provided at the Customer-Generator's expense.
- e. Any generators eligible for tariffs NEMA, NEM2, NEMFCA or NEMBIOA (accounts with the loads from eligible accounts aggregated on the main NEM, NEM2, NEMFC or NEMBIO account pursuant as allowed under this Special Condition 4 of this NEM2 tariff) will be treated as a separate Constituent Generator Group. However at this time NEM2A may not be combined with NEMA, NEMFCA or NEMBIOA under this Special Condition.

(N)

(Continued)

Advice 4980-E  
Decision 16-01-044

Issued by  
**Steven Malnight**  
Senior Vice President  
Regulatory Affairs

Date Filed December 16, 2016  
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Resolution \_\_\_\_\_



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 17

SPECIAL  
CONDITIONS:  
(Cont'd.)

4. MULTIPLE TARIFF FACILITIES: (Cont'd.)

f. Except for Load Aggregation Arrangements, where multiple NEM - eligible Constituent Generator Groups are present and energy (kWh) is exported to the grid at the PCC, the billing credit will be based upon the proportional contribution of the energy production (kWh) of each NEM-eligible Constituent Generator Group over the billing period as follows:

- 1) Sum all NEM-eligible Constituent Generator Groups' NGOM readings. For NEM Paired Storage, follow the provisions in Special Condition 9. (T)
- 2) Determine the proportion of energy (kWh) attributable to each NEM-eligible Constituent Generator Group by dividing the NGOM reading of each by the sum from (1) above.
- 3) NEM-eligible Export is the lesser of either all exported energy (kWh) as measured at the PCC or the sum of the energy (kWh) per (1) above.
- 4) Take the NEM-eligible Export and assign it to each NEM-eligible Constituent Generator Group based on its respective proportion of NGOM reading.
- 5) Determine the bill credit for the customer-generator as provided under the customer-generator's OAS in combination with the net energy metering tariff billing treatment type for each NEM-eligible Constituent Generator Group.
- 6) If interval metering is chosen per Special Condition 4.g(2)(c) of this special condition, this allocation of bill credit will be done on the aggregated intervals over a billing period. If the OAS is a time-of-use (TOU) rate schedule, the allocation will be performed for each aggregated TOU period separately.
- 7) Generating Facilities including only multiple NEM2 REGFs are not Multiple Tariff Facilities and the customer-generator will be billed as provided in Special Condition 2 of this tariff.

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 18

SPECIAL  
CONDITIONS:  
(Cont'd.)

4. MULTIPLE TARIFF FACILITIES: (Cont'd.)

g. Multiple Tariff Facility Configurations and Metering.

1) Except for Load Aggregation Arrangements, for two or more types of NEM-eligible Constituent Generator Groups, the customer-generator must select one of the following options:

a) Install NGOM on each Constituent Generator Group. In addition, metering is required at the PCC capable of separately registering the flow of energy (kWh) in two directions. Billing credit will be calculated as provided for in Special Condition 4.f. Generation Rate Component charges are the charges for energy (kWh) used based on the generation rate component of the energy charge under the customer-generator's rate schedule(s). Billing credit will be applied consistent with the appropriate net metering tariff as follows:

(T)

- i. First, apply NEMBIO credits (if any) to Generation Rate Component charges on any aggregated accounts, and then to Generation Rate Component charges on the account served by the generating facility (Host Account).
- ii. Second, apply NEMFC credits (if any) to Generation Rate Component charges on the account served by the generating facility.
- iii. Third, apply NEM2 credits (if any) as appropriate to the remainder of energy charges except for NBC charges for usage supplied by the grid on the account served by the generating facility.
- iv. Fourth, apply NEM credits (if any) as appropriate to the remainder of energy charges on the account served by the generating facility.
- v. No credits shall offset NBC charges calculated on all usage supplied from the grid.

b) If the customer-generator has Constituent Generator Group(s) eligible for Schedule NEMBIO or NEMFC, and has a Constituent Generator Group eligible for Schedule NEM2 and/or NEM consisting of one or more Renewable Electrical Generation Facilities, the customer-generator may elect to take service for such under either Schedule NEMBIO or NEMFC, as appropriate, for all of the Constituent Generator Group(s). Likewise, if the customer-generator has Constituent Generator Group(s) eligible for NEM and NEM2, the customer-generator may elect to take service for both under NEM2.

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 19

SPECIAL  
CONDITIONS:  
(Cont'd.)

4. MULTIPLE TARIFF FACILITIES: (Cont'd.)

g. Multiple Tariff Facility Configurations and Metering.

2) For all eligible combinations of NEM-Eligible Constituent Groups and non-NEM eligible Constituent Groups, the Customer-Generator must select one of the following options:

a) **The Non Export Relay Option:** A Customer-Generator must install a Non-Export relay on their non-NEM Constituent Generator Groups and install metering as follows: 1) If there is only one type of NEM-eligible Constituent Generator Group then metering at the PCC is all that is required and the terms of the appropriate NEM2 tariff for that group will apply; 2) If there are two or more types of NEM2-Eligible Constituent Generator Groups, then Metering at the PCC and NGOM metering of each NEM2-Eligible Constituent Generator Group is required. The requirements of Special Condition 4.f and 4.g apply. (T)

b) **The Load Metering Option:** The customer-generator must install NGOM on each NEM2-Eligible Constituent Generator Group, install energy consumption metering at the load, and install metering at the PCC as follows: 1) If there is one type of NEM2-Eligible Constituent Generator Group then the terms of the appropriate NEM2 tariff for that group will apply; 2) If there are two or more types of NEM2-Eligible Constituent Generator Groups, then the terms of Special Condition 4.f and 4.g apply. (T)

c) **The Interval Meter Option:** The customer-generator must install interval NGOM on each NEM2-Eligible Constituent Generator Group and install interval metering at the PCC as follows: 1) If there is one type of Constituent Generator Group then the terms of the appropriate NEM2 tariff for that group will apply; 2) If there are two or more types of NEM2-Eligible Constituent Generator Groups, then the terms of Special Condition 4.f and 4.g for interval metering apply. Energies (kWh) generated in an interval are aggregated over a billing period according to the OAS. (T)

h. Multiple Tariff Facilities, served under DA or CCA Service, may only participate to the extent their ESP or CCA offers net metering for the specific constituent generator group(s). All accounts for each specific constituent generator group must be served by the same ESP.

i. Multiple Tariff Facilities involving multiple Load Aggregation Constituent Generator Groups, except for those allowed under Special Condition 5.g above, are not permitted at this time. (T)  
(T)

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 20

SPECIAL  
CONDITIONS:  
(Cont'd.)

5. NET SURPLUS ELECTRICITY COMPENSATION (NSC):

Pursuant to P.U. Code Sections 2827 (h)(4)(A), this Special Condition was established to provide a NEM customer having **Net Surplus Electricity**, (defined as all electricity generated by an eligible customer measured in kilowatt-hours over a Relevant Period – as defined in Special Condition 2.h of this tariff – that exceeds the amount of electricity consumed by that eligible customer), with **Net Surplus Electricity Compensation (NSC)** for the Net Surplus Electricity, while leaving other ratepayers unaffected. A NEM2 customer who has Net Surplus Electricity will be known as a **Net Surplus Generator**.

(D)  
|  
(D)

- a. NSC Applicability – All bundled 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 at the time of their true-up. This includes Net Surplus Generators on sub-schedules NEM2S, NEM2EXP, and NEM2EXPM. A NEM2MT Net Surplus Generator is also eligible to receive NSC but only for the one or more generators at the same metered account eligible for billing treatment under Special Condition 2.a through 2.f of this NEM2 schedule, or the applicable tariff for the non-NEM2 generator.

Net Surplus Generators who receive Direct Access (DA) Service from an ESP or who receive Community Choice Aggregation Service from a CCA are not eligible to receive NSC from PG&E but may contact their ESP or CCA Provider to see if they provide NSC.

If an eligible customer-generator elects Load Aggregation as described in Special Condition 6, the Generating Account shall be permanently ineligible to receive net surplus electricity compensation, and PG&E shall retain any kilowatt-hours and zero out any credits remaining on each account in the Load Aggregation Arrangement at the end of the Relevant Period. However, if an Aggregated Account that is not a Generating Account is separated from the Arrangement, and subsequently qualifies for NEM2, it is also eligible for NSC.

(Continued)





**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 21

SPECIAL  
CONDITIONS:  
(Cont'd.)

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

- 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 includes a Renewable Attribute Adder (RAA) based on the California Energy Commission (CEC) implementation methodology.

Under the CEC’s Renewables Portfolio Standard (RPS) Eligibility Guidebook<sup>6</sup>, an ownership verification and tracking process is set forth for Renewable Energy Credits (RECs) created by Net Surplus Generators. (T)

PG&E will pay a RAA for Net Surplus Electricity if the Net Surplus Generator completes Form 79-1155-02 - *Schedules NEM2, NEM2V, NEMV2MSH, Net Surplus Electricity (NSE) Renewable Energy Credits Compensation Form* which requires that each true-up a Net Surplus Generator confirm it or its REC aggregator has:

- 1) certified ownership of Net Surplus Electricity Renewable Energy Credits associated with their Net Surplus Electricity;
- 2) obtained certification for the Renewable Portfolio Standards (RPS) eligibility of the Electrical Generation Facility from the CEC and provide evidence of this certification to PG&E; and
- 3) transferred the ownership of the WREGIS Certificates to PG&E.

The RAA will be calculated using the most recent Western Electricity Coordinating Council (WECC) average renewable premium, based on United States Department of Energy (DOE) published data as submitted via advice letter annually in compliance with Resolution E-4475 and Decision 11-12-018.

<sup>6</sup> The CEC RPS Eligibility Guidebook is available at: <https://www.energy.ca.gov/programs-and-topics/programs/renewables-portfolio-standard>

(T)  
(T)

(Continued)







**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 23

SPECIAL  
CONDITIONS:  
(Cont'd.)

6. LOAD AGGREGATION – NEM2A:

- a. Load Aggregation is available to an eligible customer-generator, that has load served by multiple meters (“Aggregated Accounts”) located on the property where the REGF (“Generating Account”) is located and on property adjacent or contiguous to the property on which the REGF is located, only if those properties are solely owned, leased, or rented by the eligible customer-generator, subject to the terms of this Special Condition and elsewhere in this tariff. All of the Aggregated Accounts, including a single Generating Account, that are billed together under this Special Condition are referred to as an Arrangement. Customer-generators are eligible to participate in Load Aggregation provided that all meters in a Load Aggregation Arrangement are located (i) on the property where the REGF is located, or (ii) are located within an unbroken chain of contiguous parcels that are all solely owned, leased or rented by the customer-generator. For purposes of Load Aggregation, parcels that are divided by a street, highway, or public thoroughfare are considered contiguous, provided they are within an unbroken chain of otherwise contiguous parcels that are all solely owned leased or rented by the customer-generator, as verified in Form 79-1202. For purposes of determining parcel contiguity under this provision, “public thoroughfare” will include a canal, railroad track or transmission right-of-way, when these features are isolated on third party owned property. When a third party owned easement is located on a NEM2A customer-generator’s property, there is no impairment to parcel contiguity. In addition, an irrevocable easement granting sole use and control to the NEM2 customer-generator for an entire parcel can be used to establish contiguity. Otherwise, a customer-generator’s easement on a third party owned parcel will not be sufficient to establish parcel contiguity for NEM2A.

(T)

(Continued)

Advice 5634-E-A  
Decision

Issued by  
**Robert S. Kenney**  
Vice President, Regulatory Affairs

Submitted	July 10, 2020
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Resolution	





**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 25

SPECIAL  
CONDITIONS:  
(Cont'd.)

6. LOAD AGGREGATION – NEM2A: (Cont'd.)

(N)

c. Billing Service Charges – An eligible customer-generator electing Load Aggregation shall remit service charges for the cost of providing billing services as follows. These charges shall include:

1) One-Time Setup Charge of \$25.00 per Aggregated Account and for the Generating Account, as defined in this Special Condition, and cumulatively, shall be limited to no more than \$500 per Load Aggregation Arrangement. Any change to the number of accounts included in a NEM2A arrangement is subject to this one-time fee. This Setup Charge shall be assessed without regard to the \$500 limit for accounts added after the PTO date.

Plus,

2) Monthly Charge of \$5 Per Aggregated Account and for the Generating Account as defined in this Special Condition.

7. CALIFORNIA DEPARTMENT OF CORRECTIONS AND REHABILITATION (CDCR)

“Eligible customer-generator” includes the Department of Corrections and Rehabilitation using a renewable electrical generation technology, or a combination of renewable electrical generation technologies, with a total capacity of not more than eight megawatts, that is located on the department’s owned, leased, or rented premises, and is interconnected and operates in parallel with the electrical grid, and is intended primarily to offset part or all of the facility’s own electrical requirements.

The amount of any wind generation exported to the electrical grid shall not exceed 1.35 megawatt at any time. CDCR Eligible Customer Generators are subject to Network and/or Distribution upgrade costs in accordance with Rule 21 Section D.13.e.

CDCR shall use Interconnection Application Form 79-1174-02 to apply under this Special Condition. In addition to submitting the application form, CDCR will notify PG&E at rule21gen@pge.com of the Generating Facility’s size, and if applicable, any allocation between NEM2 and non-NEM2 generation.

(N)

(Continued)

Advice 4980-E  
Decision 16-01-044

Issued by  
**Steven Malnight**  
Senior Vice President  
Regulatory Affairs

Date Filed December 16, 2016  
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Resolution \_\_\_\_\_



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 26

SPECIAL  
CONDITIONS:  
(Cont'd.)

(D)  
(D)

8. NEM2 Grandfathering Provisions

(T)/(L)

This Special Condition is applicable to all Customers receiving service on Schedules NEM2, NEM2V, and NEM2VMASH ("the NEM-2 Schedules") and who have submitted all documentation necessary to receive service on the NEM-2 schedules.

- a. 20-Year Transition Period. Pursuant to D.16-01-044, Customers who are receiving service on the NEM-2 schedules, or who have submitted all documentation necessary to receive service on a NEM-2 Schedule, are eligible to continue receiving service on that NEM-2 Schedule for a period of 20 years from the original year in which their Generating Facility was interconnected to PG&E's grid, indicated by and measured from the date on which the Customer originally received permission to operate (PTO) the Generating Facility from PG&E and ending at the conclusion of the Customer's applicable Relevant Period that ends immediately on or after the 20th anniversary of the original PTO date. For example, if a Customer initially received PTO on April 1, 2018, the Customer is eligible to continue receiving service on this Schedule through the conclusion of the Relevant Period ending immediately on or after March 31, 2038.

Customers served on Schedule NEM, NEMV, or NEMVMASH who elect to make a one-time switch to the corresponding NEM-2 Schedule prior to the conclusion of their Schedule NEM, NEMV or NEMVMASH 20-year transition period can continue service under the corresponding NEM-2 Schedule from the date of their original Schedule NEM, NEMV or NEMVMASH PTO date; these Customers may not restart their 20-year transition period by electing to move to this Schedule. Customers electing to switch to the corresponding NEM-2 Schedule prior to the conclusion of their Schedule NEM, NEMV or NEMVMASH 20-year transition period permanently forfeit any of their Generating Facility's remaining transition period eligibility on Schedule NEM, NEMV or NEMVMASH and may not later change back to receiving service under Schedule NEM, NEMV or NEMVMASH.

(L)

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 27

SPECIAL  
CONDITIONS:  
(Cont'd.)

- 8. NEM2 GRANDFATHERING PROVISIONS (Cont'd.)
  - b. Modifications<sup>7</sup>. REGFs eligible for the 20-year transition period outlined above that are modified and/or repaired shall remain eligible for the remainder of their 20-year transition period as long as the modifications and/or repairs do not increase the REGF by more than the greater of:
    - 1) 10 percent of the REGF's nameplate rating capacity, as established when the REGF was originally interconnected, or
    - 2) 1 kW;

and provided the modifications and/or repairs do not result in the REGF exceeding the Customer's annual onsite load.
  - c. Transferability. REGF eligible for the 20-year transition period shall not lose their eligibility if transferred to a new owner, operator, or PG&E account, provided the REGF remains at its original location.<sup>8</sup>

<sup>7</sup> Customers making modifications and/or additions to their REGF that exceed the 10 percent or 1 kW limit referenced above have the option of either metering the additions and/or modifications separately under another eligible tariff or other authorized process, or having the entire REGF served under another eligible tariff, subject to the terms and conditions contained therein. This requirement will only be enforced upon the development of a new NEM Successor Tariff that supersedes D.16-01-044, or by the direction of the CPUC. (T)

<sup>8</sup> The transfer of an existing REGF to a new location is considered a new installation requiring a new Interconnection Agreement that is subject to the applicable tariffs in place at the time the new Interconnection Request is completed. (T)

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 28

SPECIAL  
CONDITIONS:  
(Cont'd.)

9. NEM Paired Storage

a. Definitions:

NEM Paired Storage:

NEM Paired Storage is defined as qualifying energy storage devices ("storage system") paired with a REGF that either:

(i) meets the Renewables Portfolio Standard (RPS) Guidebook<sup>9</sup> requirements as an "addition or enhancement" as described in Section c. below, or (T)

(ii) is eligible to received certain benefits as is described this Special Condition by virtue of the fact that it is paired with a REGF although it is not exclusively renewable charged, pursuant to California Public Utilities Commission (CPUC) Decision (D.) 14-05-033 and D.19-01-030.

AC-Coupled:

The REGF has its own inverter or set of inverters; and separately, the storage system has its own inverter or set of inverters, pursuant to CPUC D.19-01-030.

In AC-coupled NEM-eligible GFs paired with storage devices, storage device capacity is determined as the (AC) maximum discharge capacity. The size of the storage system in AC-coupled REGF plus storage systems is the inverter's (or inverters') nameplate capacity (nameplate capacities summed).

DC-Coupled:

The REGF and the storage share the same inverter, or set of inverters, pursuant to CPUC D.19-01-030.

The size of the storage system is the lesser of the shared inverter's (or inverters') nameplate capacity (capacities summed) and the storage device's (devices') maximum continuous discharge capacity (capacities summed) listed on the device's (devices') technical specifications sheets. A storage device's maximum continuous discharge capacity may be listed on technical specification sheets using different terminology; PG&E will use common sense to determine whether a device's technical specification sheet includes the appropriate metric for purposes of determining system size, regardless of the terminology used. If that metric is not included, PG&E will rely on the inverter's nameplate rating.

<sup>9</sup> The RPS Guidebooks can be found at: <https://www.energy.ca.gov/programs-and-topics/programs/renewables-portfolio-standard>

(T)  
(T)

(Continued)





**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 29

SPECIAL  
CONDITIONS:  
(Cont'd.)

9. NEM Paired Storage

a. Definitions: (Cont'd.)

No Grid Charging:

A storage system that uses a power control configuration that is either certified to a national standard or to a utility-approved interim testing procedure, either of which ensures that the storage system cannot be charged from the PG&E grid<sup>9</sup>. A PG&E approved physical non-import relay or a functionally equivalent non-import configuration to prevent grid power from flowing to the storage device is also permitted. Customers may not have access to software settings, only the installer and the storage provider would be able to access and select settings profiles. Inadvertent but minor instances of grid import are permitted. Such inadvertent grid imports must not exceed durations of ten seconds.

(T)

No Storage Export:

A storage system that uses a power-control configuration that is certified either to a national standard or to a utility-approved interim testing procedure, either of which ensures that the storage system cannot export to PG&E's grid. A PG&E approved physical non-export relay or a functionally equivalent non-export configuration to prevent grid power from flowing to the storage device is also permitted. Inadvertent but minor instances of storage export are permitted. Such inadvertent grid exports must not exceed durations of ten seconds.

b. Interconnection

NEM Paired Storage will have the same interconnection cost responsibility as the NEM generator that it is paired with, including charges or fees related to the interconnection application, Rule 21 engineering study/review, and/or any associated distribution upgrades.

See Section c.5. below for additional information

c. Types of NEM Paired Storage

The Renewables Portfolio Standard (RPS) Guidebook<sup>8</sup> establishes two categories of energy storage that may be considered an addition or enhancement to a renewable electrical generation facility: "integrated" and "directly connected" storage.

1) Integrated Storage:

Integrated Energy Storage is defined in the RPS guidelines as methods of storing energy from a renewable energy resource that are integrated into the REGF as part of the generation process.

<sup>9</sup> In the event of an expected PSPS (Public Safety Power Shutoff) outage, as evidenced by a 48-hour notice from PG&E to the expected outage start, a storage system defined as "No Grid Charging" and designed for resiliency, meaning it is capable of providing back-up power safely and in compliance with all relevant tariffs, electric rules, other requirements, and is qualified by PG&E to participate, will be temporarily permitted to charge from the grid in order to prepare for the PSPS outage. The notification must specify an impact to the customer generator location. This temporary permission will begin at the publication of the 48-hour notification and will end 24 hours after the end of the PSPS event, as marked by the restoration of power at the site. If power is not shutoff, the temporary permission will end 72 hours after the original 48-hour notice. At the end of the temporary permission period as described above, the storage system will need to revert to "No Grid Charging" operation mode in order to maintain compliance with the NEM tariff, notwithstanding additional PSPS Alerts. At no point during the temporary permission period will the system be permitted to violate the interconnection agreement. Specifically, the storage system must not increase the host facility's historical peak demand.

(N)

(N)

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 30

SPECIAL  
CONDITIONS:  
(Cont'd.)

- 9. NEM Paired Storage
  - c. Types of NEM Paired Storage
    - 1) Integrated Storage: (Cont'd.)

Note that, for battery-based storage, the storage device must **only** be capable of storing energy from the REGF to be considered Integrated Storage.

INTEGRATED STORAGE (By definition the storage device must only be capable of storing energy from the REGF)			
SCENARIO	Billed As	Interconnection Agreements	Interconnection Costs
AC Coupled Or DC Coupled	billed as if storage and REGF were all one generator (e.g. NEMS, NEMEXP)	≤ 1 MW apply with 79-1174-02 and Interconnection agreement 79-1193-02	Per 5.i
		> 1 MW apply with 79-1174-02 and Interconnection agreement 79-1198-02	Per 5.ii or iii

(T)

- 2) Directly Connected:

Directly Connected NEM Paired Storage is defined in the RPS guidelines as meeting the following requirements:

- (i) The storage device is directly connected to the REGF via an internal power line (i.e., power may not be transmitted from the renewable facility to the energy storage via an external distribution line) and
- (ii) The storage device must be operated as part of the NEM eligible facility.

Note that the storage device is **not** required to be exclusively charged by the REGF.

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 31

SPECIAL  
CONDITIONS:  
(Cont'd.)

- 9. NEM Paired Storage
  - c. Types of NEM Paired Storage
    - 2) Directly Connected: (Cont'd.)

Directly Connected Cases:

(i) DC-Coupled storage system sized 10kW or smaller. DC-Coupled storage systems sized 10kW or smaller are not required to meet either the "No Grid Charging" or "No Storage Export" requirements, must apply with 79-1174-02, and either complete interconnection agreement Form 79-1193-02 (solar and/or wind electric facilities of 30kW or less) or Form 79-1069-02 (all other REGF with a storage system configurations fulfilling the requirements of "No Grid Charging"). All configurations will be billed using the estimation methodology as described in Section g.1) of this special condition when no additional metering is installed as described in "Large NEM-Eligible GFs" below.

(ii) DC-Coupled storage system sized greater than 10kW

The DC-Coupled storage systems sized greater than 10kW must satisfy the definition of "No Storage Export", apply with 79-1174-02, complete Form 79-1069-02 and will be billed as described for Large NEM paired Storage in Section 3)(ii) of this special condition.

For this case, there are no restrictions on the storage system size (kW).

(iii) Large AC Coupled storage system ("Large NEM-eligible GFs")

Large NEM-eligible Generating Facilities (GFs) are NEM-eligible GFs paired with storage sized larger than 10 kW. For Large NEM-eligible GFs, the storage system shall have a maximum output power no larger than 150% of the NEM-eligible generator's maximum output capacity. Pursuant to Decision 20-06-017 the maximum output capacity limit shall not apply for a period of 3 years starting on August 16, 2020.

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Large NEM-eligible GFs are required to select one of the following:

- a) install a non-export relay on the storage device(s);
- b) install an interval meter for the NEM-eligible generation, meter the load, and meter total energy flows at the point of common coupling;
- c) install an interval meter directly to the NEM-eligible generator(s); or
- d) or meet the requirements of No Grid Export

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 32

SPECIAL  
CONDITIONS:  
(Cont'd.)

9. NEM Paired Storage

c. Types of NEM Paired Storage

2) Directly Connected: (Cont'd.)

(i) Large AC Coupled storage system ("Large NEM-eligible GFs")  
(Cont'd.)

Large NEM-eligible GFs must apply with 79-1174-02, either complete interconnection agreement Form 79-1193-02 (solar and/or wind electric facilities of 30kW or less) or Form 79-1069-02 (all other REGF with a storage system configurations), and will be billed as described in Section 3.(ii) of this special condition.

(ii) Small AC-Coupled storage systems ("Small NEM-eligible GFs")

Small NEM-eligible Generating Facilities (GFs) are NEM-eligible GFs paired with storage sized 10 kW or smaller. For small NEM-eligible GFs, the storage device is not required to be sized to the customer's demand or the NEM generator. Small NEM-eligible GFs have the option to install metering as required for Large NEM-eligible GFs to be billed as described in Section 3.) (ii) of this special condition. Otherwise, it will be billed using the estimation methodology describe in Section 3.) (i) of this special condition.

Small NEM-eligible GFs must apply with the 79-1174-02 (NEM2) and complete the 79-1193-02 (NEM2) when the NEM-Eligible GF is sized 30kW or less or apply with the 79-1174-02 (NEM2) and complete the 79-1069-02 (NEM2) when the NEM-eligible GF exceeds 30kW.

(N)

(N)

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 33

SPECIAL  
CONDITIONS:  
(Cont'd.)

- 9. NEM Paired Storage
  - c. Types of NEM Paired Storage

DIRECTLY CONNECTED - Table 11.2 (This table covers <b>storage that is NOT 100% REGF charged</b> ) For Both AC and DC Coupled Storage						
May Include <ul style="list-style-type: none"> <li>▶ No-Grid Charged storage (if other nonrenewable generation present)</li> <li>▶ Non Storage Export (if other nonrenewable generation present)</li> </ul> Includes All <ul style="list-style-type: none"> <li>▶ Grid Charged Storage And Storage Exports</li> </ul> All apply with Application 79-1174-02						
Includes <ul style="list-style-type: none"> <li>▶ Non-Storage Export with either NGOM or non-export relay equivalent (if no other nonrenewable generation present)</li> </ul> All apply with Application 79-1174-02						
	PV/Wind < 30 kw	Non- PV/Wind REGF ≤1MW  >30kW PV/Wind ≤1MW	REGF >1Mw	Bill as	IC costs	Notes
Storage ≤ 10kw	79-1093-02	79-1069-02	79-1078-02	§3i	Per 5.i	Estimation Methodology
Storage > 10kw And < 150% <sup>10</sup>	79-1069-02	79-1069-02	79-1078-02	§3ii	Per 5.ii or iii	<b>NGOM, No Grid Charging, No Storage Export<sup>11</sup></b>
Storage > 10kw And > 150%	Set up and bill as NEMMT (not under NEM-Paired Storage section)					

<sup>10</sup> the storage system shall have a maximum output power no larger than 150% of the NEM-eligible generator's maximum output capacity. Pursuant to Decision 20-06-017 the maximum output capacity limit shall not apply for a period of 3 years starting on August 16, 2020.

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<sup>11</sup> see definition of "No Grid Charging" storage and "No Storage Export" above in 9.a above.

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 34

SPECIAL  
CONDITIONS:  
(Cont'd.)

9. NEM Paired Storage

c. Types of NEM Paired Storage

3) Billing for NEM Paired Storage

(i) Estimation Methodology For Small NEM-eligible GFs

Small NEM-eligible GFs without metering installed (as required for Large NEM-eligible GFs) will use an estimation methodology, which caps maximum allowable NEM bill credits based on a monthly output profile.

- a. California Solar Initiative Expected Performance-Based Buydown (CSI EPBB) calculator, PG&E will establish a maximum cap for NEM-eligible exports for each monthly billing period based on the EPBB production estimate for the customer's NEM-eligible generator.

The monthly output estimation should align with a customer's billing period (e.g., if the customer's billing date is January 15, the maximum allowed NEM export should be based on a January output estimation.)

- b. Any export exceeding this limit would not be eligible for NEM credit and would be forfeited. Peak period exports would be reduced first, followed by partial peak and then off peak as necessary.

For example, if there was an export to the grid of 150 kWh and the EPBB-based limit for the month was set at 100 kWh, then the excess 50 kWh would be deducted from the actual exports recorded, beginning with exports that occurred during peak periods.

- c. In the event the Small NEM-eligible GF is combined with other generation facilities pursuant to Special Condition 4, the billing provision of Special Condition 4 will apply, not this billing estimation methodology.

Should a customer decide to opt-out of using this estimation methodology, the customer must install one of the metering requirements described in the Large NEM-eligible GFs section, and the customer may only switch at the start of a new NEM Relevant Period.

- (ii) Large NEM-eligible GFs are billed consistent with Special Condition 4 with the storage treated as a non-NEM eligible generator.

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(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 35

SPECIAL  
CONDITIONS:  
(Cont'd.)

- 9. NEM Paired Storage (L)
- c. Types of NEM Paired Storage (L)
  - 4) NEM Paired Storage Output Metering Costs (T)/(L)
    - (L)
    - PG&E will install standard metering equipment whenever possible while interconnecting NEM Paired Storage systems. Standard metering equipment for this purpose comprises a single meter which is a self-contained, single phase, SmartMeter. The fee for installation of standard metering equipment is no more than \$600.00.
    - However, this fee cap does not apply to NEM Paired Storage requiring complex metering solutions. Complex metering solutions include any configuration other than the standard equipment described above. The cost for complex metering varies and is based on actual costs which will be described in the customer's invoice.
    - 5) NEM Paired Storage Interconnection Cost Responsibility (T)/(L)
    - (L)
    - For the purpose of determining if a NEM Paired Storage REGF exceeds 1 MW criterion, refer to the sizing definition included in the AC-Coupled and DC-Coupled definition at the beginning of this Special Condition.
    - (L)
    - i) NEM Paired Storage REGF < 1 MW - The storage will have the same interconnection cost responsibility as the NEM-eligible GF that it is paired with for a REGF less than or equal to 1 MW. (N)
    - ii) NEM Paired Storage REGF > 1 MW - The storage will have the same interconnection cost responsibility as the NEM generator that it is paired with for a REGF greater than 1 MW
    - iii) In the event the storage is added at a later date after the permission to operate of the NEM-eligible GF it is subsequently paired with, the storage applicant will be required to pay the same interconnection fees and costs that the NEM-eligible GF would be required to pay, as provided in Electric Rule 21. (N)





**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 36

SPECIAL  
CONDITIONS:  
(Cont'd.)

9. NEM Paired Storage (Cont'd.)

d. Storage Size Dependent Requirements

Requirements differ depending on the size of the NEM Paired Storage and whether it is paired with a solar generator or not. The storage device size is determined by the inverter alternating current nameplate rating.

e. Requirements for Large NEM Paired Storage (i.e., All NEM Paired Storage Devices except Solar NEM paired with Storage Sized 10 KW and Smaller)

For NEM-paired storage systems with storage devices larger than 10 kW, the NEM Paired Storage shall have a maximum output power no larger than 150% of the NEM-eligible generator's maximum output capacity. Pursuant to Decision 20-06-017 the maximum output capacity limit shall not apply for a period of 3 years starting on August 16, 2020.

(T)  
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(T)

Large NEM Paired Storage systems are required to either:

- 1) install a non-export relay on the storage device(s);
- 2) install an interval meter for the NEM-eligible generation, meter the load, and meter total energy flows at the point of common coupling; or
- 3) install an interval meter directly to the NEM-eligible generator(s).

f. Requirements for Small NEM Paired Storage (i.e., Solar NEM Paired with Storage Devices Sized 10 KW or Smaller)

Small NEM Paired Storage is not required to be sized to the customer demand or the NEM generator. Small NEM Paired Storage has the option to install metering as required for Large NEM Paired Storage or may chose the estimation methodology describe in Section g.

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 37

SPECIAL  
CONDITIONS:  
(Cont'd.)

9. NEM Paired Storage (Cont'd.)

(L)

g. Billing for NEM Paired Storage

1) Estimation Methodology For Small NEM Paired Storage

Once implemented in PG&E's billing system, Small NEM Paired Storage may use an estimation methodology, which caps maximum allowable NEM bill credits based on a monthly output profile.

a) California Solar Initiative Expected Performance-Based Buydown (CSI EPBB) calculator, PG&E will establish a maximum cap for NEM-eligible exports for each monthly billing period based on the EPBB production estimate for the customer's NEM-eligible generator.

The monthly output estimation should align with a customer's billing period (e.g., if the customer's billing date is January 15, the maximum allowed NEM export should be based on a January output estimation.)

(L)

(L)

(L)

(Continued)

Advice 5501-E-B  
Decision 19-01-030

Issued by  
**Robert S. Kenney**  
Vice President, Regulatory Affairs

Submitted  
Effective  
Resolution

November 8, 2019  
January 6, 2020



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 38

SPECIAL  
CONDITIONS:  
(Cont'd.)

- (D)
- (D)
- 9. NEM Paired Storage (Cont'd.) (L)
- g. Billing for NEM Paired Storage
  - b) Any export exceeding this limit would not be eligible for NEM credit and would be forfeited. Peak period exports would be reduced first, followed by partial peak and then off peak as necessary.
 

For example, if there was an export to the grid of 150 kWh and the EPBB-based limit for the month was set at 100 kWh, then the excess 50 kWh would be deducted from the actual exports recorded, beginning with exports that occurred during peak periods.
  - c) In the event the Small NEM Paired Storage is combined with other generation faculties pursuant to Special Condition 4, the billing provision of Special Condition 4 will apply, not this billing estimation methodology.
 

Should a customer decide to opt-out of using this estimation methodology, the customer metering must be as provided in Section e. ii. above, and the customer may only switch at the start of a new NEM Relevant Period.
- 2) Large NEM Paired Storage is billed consistent with Special Condition 4 with the storage treated as a non-NEM eligible generator. (L)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 39

SPECIAL  
CONDITIONS:  
(Cont'd.)

10. Natural or Man-Made Disasters

Pursuant to Special Condition 8, all Customers receiving service on Schedule NEM2 who impacted by a natural or man-made disaster may request service on this tariff from (i) the date of the issuance of their original pre-natural-or- man-made disaster "permission to operate" (PTO) letter until (ii) the date of the customer's first Energy True Up in the twenty first (21st) year.

Impacted Customers must:

- (i) reapply for interconnection with a replacement system sized to generate no more than the 12 months of historic, or estimated, usage (kWh), and
- (ii) when reapplying for interconnection, submit proof of destruction of the renewable generator, if requested by PG&E.

If the generator needs to be replaced due to a natural or man-made disaster PG&E will true-up the NEM account(s) pursuant to Special Condition 2.h., and Net Surplus Compensation will be issued, if any, pursuant to Special Condition 5, up to the date of the natural or man-made disaster, unless the Customer requests that PG&E continue to bill the Customer on NEM2 through the Customer's the next regular true-up date.

(D)  
(D)

(N)

(N)

(Continued)



**ELECTRIC SCHEDULE NEM2  
NET ENERGY METERING SERVICE**

Sheet 40

SPECIAL  
CONDITIONS:  
(Cont'd.)

10. Natural or Man-Made Disasters (Cont'd)

The intervening period from destruction of the generator to PTO of the replacement generator must be no longer than two years, unless reasonable documentation acceptable to PG&E is provided showing that the new interconnection is in process. The interconnection application must be completed by the same NEM2 customer who was taking service on NEM2 prior to the Natural or Man-Made Disaster. If the generator is not replaced by the same NEM2 Customer, but the property is sold to a new owner after the destruction of the generator, this provision does not extend to the new owner. The new owner must apply and take service under the NEM tariff in effect at the time and is subject to all the requirements of a new customer seeking interconnection for that NEM tariff.

Customers impacted by Natural or Man-Made Disasters who meet the requirements included in this Special Condition and whose replacement system is sized<sup>12</sup> no greater than 1 megawatt (MW) are exempt from the interconnection application fee when reapplying.

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Customers impacted by Natural or Man-Made Disasters must comply with all requirements associated with the installation of Smart Inverter technology, as defined in Electric Rule 21.

<sup>12</sup> Sized as defined in Special Condition 3.

(T)