

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



December 7, 2009

Advice Letter 3555-E

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

Subject: Revisions to Electric Schedule NEM – *Net Energy Metering* to Voluntarily Increase Pacific Gas and Electric Company's (PG&E) Cap to 3.5 Percent, and Related NEM Administrative Matters

Dear Mr. Cherry:

Advice Letter 3555-E is effective December 7, 2009.

We acknowledge the timely protest of the Interstate Renewable Energy Council (IREC) and note that the Commission may, at a later date, consider an appropriate definition of "aggregate customer peak demand" for the purposes of calculating the net energy metering (NEM) cap. Such consideration would likely occur in the currently active Rulemaking (R.) 08-03-008 related to distributed generation. Until such time as the Commission may properly consider this issue, the definition of "aggregate customer peak demand" in Advice Letter 3555-E shall apply for PG&E.

Sincerely,

A handwritten signature in blue ink, appearing to read "Julie A. Fitch".

Julie A. Fitch, Director
Energy Division

CC: Kevin T. Fox, Attorney for the Interstate Renewable Energy Council

November 5, 2009

Advice 3555-E

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: Revisions to Electric Schedule NEM¹ – Net Energy Metering to Voluntarily Increase Pacific Gas and Electric Company’s (PG&E) Cap to 3.5 Percent, and Related NEM Administrative Matters

Purpose

Pacific Gas and Electric Company (PG&E) hereby submits for filing revisions to its Electric Schedules NEM and NEMVNMA to voluntarily increase the combined cap on the total rated generating capacity used by eligible customer-generators from 2.5 percent to 3.5 percent of PG&E’s aggregate customer peak demand.

Background

PG&E remains committed to addressing the issue of climate change and increasing the amount of renewable energy that is provided to our customers. As part of that commitment, PG&E in this advice filing voluntarily requests an increase in the net energy metering cap to 3.5 percent.

Currently, the net energy metering cap comes from Public Utilities (PU) Code Sections 2827 (c)(1) and (c)(3), and is included in PG&E’s Schedule NEM as follows:

This rate schedule is available on a first-come, first-served basis to customers that provide PG&E with: (a) a completed Net Energy Metering Application including all supporting documents and required payments; AND (b) a completed signed Net Energy Metering Interconnection Agreement; AND (c) evidence of the customer’s final inspection clearance from the governmental authority having jurisdiction over the generating facility; until such time as the total rated generating capacity used by eligible customer-generators on Rate

¹ This also includes Electric Schedule NEMVNMA – Virtual Net Energy Metering For Multifamily Affordable Housing (MASH/NSHP) With Solar Generator(s), which shares the same cap.

Schedule NEM and NEMVNMA exceeds two and one-half (2.5) percent of PG&E's aggregate customer peak demand.

PG&E believes an increase to the net energy metering cap to 3.5 percent will ensure that investment in the state of California for solar by homeowners and businesses is not slowed by any concern with the cap and would allow for sufficient time to work with the Governor, the Legislature, the California Public Utilities Commission (Commission) and others on the broader issues relating to net energy metering, including any cost shifts that place a greater burden on non-participating customers.

In addition to raising the cap, PG&E seeks to clarify how it will calculate and track progress toward the 3.5 percent cap. Until recently PG&E has tracked and reported progress toward the cap using the inverter alternating current (AC) nameplate rating for participating NEM generators. The inverter size is a good estimate of generator capacity, but for solar generating systems the California Energy Commission (CEC) has developed a more realistic measure based on the photovoltaic (PV) panel output, the "CEC AC rating."² This is the calculation used to determine system capacity for participants in the CSI program. The CEC AC rating results in a more accurate system capacity number for solar generating systems. In this advice letter, PG&E is proposing language to more closely align the NEM system capacity calculation with that used in the CSI program. Modifications to Schedule NEM will provide a clear explanation on how the cap determinants – "total rated generating capacity" and "aggregate customer peak system demand" – are defined.

Specifically, the total rated generating capacity will be calculated as the sum across NEM and NEMVNMA of all of the following:

- 1) For each PV generating facility, PG&E will use the CEC AC rating; or where the CEC AC rating is not available, PG&E will multiply the inverter AC nameplate rating by 0.86.³
- 2) For wind customer-generators, PG&E will continue to use the AC nameplate rating of the generating facility.

PG&E's aggregate customer peak demand will be based on the highest published peak demand shown in the Federal Energy Regulatory Commission (FERC) Form 1, Page 401b, as reported by PG&E.

Once the cap has been reached, Schedule NEM will be closed to new customers, unless, of course, new legislative or regulatory action re-opens it.

² See Attachment 2 for a description of how the CEC AC rating is determined.

³ See Attachment 2 for a description of why the 0.86 factor is used.

Tariff Revisions

PG&E has modified its Electric Schedules NEM and NEMVNMA to reflect the above changes.

Protests

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, by facsimile or electronically, any of which must be received no later than **November 25, 2009** which is 20 days after the date of this filing. Protests should be mailed to:

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

Facsimile: (415) 703-2200
E-mail: jj@cpuc.ca.gov and mas@cpuc.ca.gov

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

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

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

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

Effective Date

PG&E requests that this advice filing become effective on regular notice, **December 7, 2009**, which is 32 calendar days after the date of filing.

Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list. Address changes to the General Order 96-B service list should be directed to PGETariffs@pge.com. Advice letter filings can also be accessed electronically at: <http://www.pge.com/tariffs>.

Brian Cherry 08

Vice President, Regulatory Relations

Attachments: Attachment 1 and 2

cc: Service List for R.08-03-008

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY ENERGY UTILITY

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

Company name/CPUC Utility No. **Pacific Gas and Electric Company (ID U39 M)**

Utility type:

ELC GAS
 PLC HEAT WATER

Contact Person: Olivia Brown

Phone #: 415.973.9312

E-mail: oxb4@pge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas
PLC = Pipeline HEAT = Heat WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: 3555-E

Tier: 2

Subject of AL: Revisions to Electric Schedule NEM – Net Energy Metering to Voluntarily Increase Pacific Gas and Electric Company's (PG&E) Cap to 3.5 Percent, and Related NEM Administrative Matters

Keywords (choose from CPUC listing): Metering

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

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: N/A

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

Summarize differences between the AL and the prior withdrawn or rejected AL: N/A

Is AL requesting confidential treatment? No

If so, what information is the utility seeking confidential treatment for: No

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

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

Resolution Required? Yes No

Requested effective date: December 7, 2009

No. of tariff sheets: 5

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

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

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

Tariff schedules affected: Electric Schedules NEM and NEMVNMA

Service affected and changes proposed: N/A

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

**CPUC, Energy Division
Tariff Files, Room 4005
DMS Branch**

**505 Van Ness Ave., San Francisco, CA 94102
njn@cpuc.ca.gov and mas@cpuc.ca.gov**

**Pacific Gas and Electric Company
Attn: Brian K. Cherry, Vice President, Regulatory
Relations**

**77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177
E-mail: PGETariffs@pge.com**

**ATTACHMENT 1
Advice NEMCAP**

| Cal P.U.C. Sheet No. | Title of Sheet | Cancelling Cal P.U.C. Sheet No. |
|---------------------------------|---|--|
| 28572-E | ELECTRIC SCHEDULE NEM NET ENERGY METERING SERVICE Sheet 1 | 28281-E |
| 28573-E | ELECTRIC SCHEDULE NEM NET ENERGY METERING SERVICE Sheet 2 | 26525-E |
| 28574-E | ELECTRIC SCHEDULE NEMVNMA VIRTUAL NET ENERGY METERING FOR MULTIFAMILY AFFORDABLE HOUSING (MASH/NSHP) WITH SOLAR GENERATOR(S) Sheet 1 | 28282-E* |
| 28575-E | ELECTRIC TABLE OF CONTENTS Sheet 1 | 28556-E |
| 28576-E | ELECTRIC TABLE OF CONTENTS RATE SCHEDULES Sheet 4 | 28559-E |



ELECTRIC SCHEDULE NEM
NET ENERGY METERING SERVICE

Sheet 1

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

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

This rate schedule is available on a first-come, first-served basis to customers that provide PG&E with: (a) a completed Net Energy Metering Application including all supporting documents and required payments; AND (b) a completed signed Net Energy Metering Interconnection Agreement; AND (c) evidence of the customer's final inspection clearance from the governmental authority having jurisdiction over the generating facility; until such time as the total rated generating capacity used by eligible customer-generators on Rate Schedule NEM and NEMVNMA exceeds three and one-half (3.5) percent of PG&E's aggregate customer peak demand.

The total rated generating capacity will be calculated as the sum of all of the following:

- 1) For each PV generating facility, PG&E will use the California Energy Commission's (CEC) AC rating; or where the CEC AC rating is not available, PG&E will multiply the inverter AC nameplate rating by 0.86.
- 2) For wind customer-generators, PG&E will use the AC nameplate rating of the wind generating facility.

PG&E's aggregate customer peak demand will be based on the highest, published peak demand shown in the Federal Energy Regulatory Commission (FERC) Form 1, Page 401b as reported by PG&E. Once the Cap has been reached, Schedule NEM will be closed to new customers.

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.

(T)
 (T)

(N)

(N)

(L)

(Continued)



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

Sheet 1

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

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

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

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

- a. a completed NEMVNMA application and interconnection agreement as described in Special Condition 3, including all supporting documents and required payments; AND
- b. evidence of the final inspection clearance from the governmental authority having jurisdiction over the Solar Generating Facility; until such time as the total rated generating capacity on Rate Schedules NEM and NEMVNMA exceeds three and one-half (3.5) percent of PG&E's aggregate peak demand (calculated as described in Rate Schedule NEM), until December 31, 2015, or until all funds available for the incentives have been allocated, whichever comes first.

(T)
 |
 (T)

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

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

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

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

(Continued)



ELECTRIC TABLE OF CONTENTS

Sheet 1

TABLE OF CONTENTS

| SCHEDULE | TITLE OF SHEET | CAL P.U.C. SHEET NO. | |
|-----------------|------------------------------|---|-----|
| | Title Page | 28575-E | (T) |
| | Rate Schedules | 28557,28558,28576,28560-E | (T) |
| | Preliminary Statements | 28561,28047,28562,28565-E | |
| | Rules | 28359-E | |
| | Sample Forms | 28385,28360,28261,27639,28280,28424,25059-E | |

(Continued)



ELECTRIC TABLE OF CONTENTS
RATE SCHEDULES

Sheet 4

| SCHEDULE | TITLE OF SHEET | CAL P.U.C. SHEET NO. |
|-----------------------|---|---|
| Rate Schedules | | |
| Other | | |
| S | Standby Service | 28399,28400, 28533,27978,28238.28239, 29240-28246,28534,28401-28404-E |
| E-DCG | DCG Departing Customer Generation, CG | 27443,23247,23667, 25122,27054,27055,25124,23252,23253,28405,23255-E |
| E-DEPART | Departing Customers | 23235-E |
| E-NWDL | New WAPA Departing Load | 27444-27452-E |
| E-NMDL | New Municipal Departing Load..... | 27453,27454,26700,26701, 26702,26703,26704,26705, 26706,26707,26708-E |
| E-LORMS | Limited Optional Remote Metering Services | 20194-E |
| E-RRB | Rate Reduction Bonds Bill Credit and Fixed Transition Amount Charge | 22296,22227-E |
| E-SDL | Split-Wheeling Departing Load | 27455-27464-E |
| E-TMDL | Transferred Municipal Departing Load | 27465,27466,25882-25891-E |
| NEM | Net Energy Metering Service..... | 28572,28573,27237-27243,26527,27244,27245,27246,26128,26129,27247-E (T) |
| NEMFC | Net Energy Metering Service For Fuel Cell Customer-Generators..... | 27248,27249,27250,27251,26134,26135,26136,27252-E |
| NEMBIO | Net Energy Metering Service for Biogas Customer-Generators | 27253-27255,26140,27256,26142,27257,26144,27258-E |
| NEMCCSF | Net Energy Metering Service for City and County of San Francisco | 28176,28177,28178,28179-E |
| NEMVNMA | Net Energy Metering – Virtual Net Energy Metering..... | 28574,28283-28291-E (T) |
| E-ERA | Energy Rate Adjustments..... | 28535,28536,28537,28538-E |
| Rate Schedules | | |
| Agricultural | | |
| AG-1 | Agricultural Power | 25903,28539,28540,24221,24222,24223,28541,25425-E |
| AG-R | Split-Week Time-of-Use Agricultural Power | 25905,27614,28542,28543, 24923,25987,24230,28544,25426-E |
| AG-V | Short-Peak Time-of-Use Agricultural Power..... | 25907,27615,28545,28546, 24928,25988,24237,24238,24239,28547,25427-E |
| AG-4 | Time-of-Use Agricultural Power..... | 25909,27616,28548, 28163, 28549,24935,25989,24936,24248,24249,28550,25428-E |
| AG-5 | Large Time-of-Use Agricultural Power..... | 25911,27617,28551,28166,28552, 24942,25990,24257,24258-24259,28553,28256,28257-E |
| AG-ICE | Agricultural Internal Combustion Engine Conversion Incentive Rate..... | 27618,28011, 28012,28554,25991,23648,23649-E |

(Continued)

**Advice 3555-E Attachment 2:
The California Energy Commission's (CEC) AC Rating**

Definition of CEC-AC:

As defined in the July 20, California Solar Initiative Program Handbook, Page 20, http://www.gosolarcalifornia.ca.gov/documents/CSI_HANDBOOK.PDF :

“For all systems, the system size must be calculated using the CEC-AC rating standards including inverter DC-to-AC losses. To calculate the CEC-AC rating, the following formula should be used:

$$\begin{aligned} \text{System Size Rating (kilowatts)} = & \text{Quantity of Photovoltaic Modules } x \\ & \text{CEC Rating of Photovoltaic Modules } x \\ & \text{CEC Inverter Efficiency Rating}/1000 \\ & \text{(watts/kilowatt)} \end{aligned}$$

In this calculation, the **CEC rating** of the Photovoltaic Modules is the “PTC” rating for a PV module as found on the “Go Solar California” website at: <http://www.gosolarcalifornia.ca.gov/equipment/pvmodule.html>

The **CEC Inverter Efficiency Rating** is the “Weighted Efficiency” for an inverter, which is found on the same website at: <http://www.gosolarcalifornia.ca.gov/equipment/inverter.php>

Use of 0.86 Factor:

PG&E uses the factor of 0.86 to adjust the inverter nameplate rating to reasonably approximate the CEC AC rating for solar systems for which the CEC AC rating data was not tracked or otherwise available. The 0.86 factor was calculated by dividing CEC AC rating by inverter nameplate rating for the approximately 30,000 systems for which PG&E had those values.

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

| | | |
|--|---|--|
| Alcantar & Kahl | Defense Energy Support Center | North Coast SolarResources |
| Ameresco | Department of Water Resources | Northern California Power Association |
| Anderson & Poole | Department of the Army | Occidental Energy Marketing, Inc. |
| Arizona Public Service Company | Dept of General Services | OnGrid Solar |
| BART | Division of Business Advisory Services | Praxair |
| BP Energy Company | Douglas & Liddell | R. W. Beck & Associates |
| Barkovich & Yap, Inc. | Douglass & Liddell | RCS, Inc. |
| Bartle Wells Associates | Downey & Brand | Recon Research |
| C & H Sugar Co. | Duke Energy | SCD Energy Solutions |
| CA Bldg Industry Association | Dutcher, John | SCE |
| CAISO | Ellison Schneider & Harris LLP | SMUD |
| CLECA Law Office | FPL Energy Project Management, Inc. | SPURR |
| CSC Energy Services | Foster Farms | Santa Fe Jets |
| California Cotton Ginners & Growers Assn | G. A. Krause & Assoc. | Seattle City Light |
| California Energy Commission | GLJ Publications | Sempra Utilities |
| California League of Food Processors | Goodin, MacBride, Squeri, Schlotz & Ritchie | Sierra Pacific Power Company |
| California Public Utilities Commission | Green Power Institute | Silicon Valley Power |
| Calpine | Hanna & Morton | Silo Energy LLC |
| Cameron McKenna | Hitachi | Southern California Edison Company |
| Cardinal Cogen | International Power Technology | Sunshine Design |
| Casner, Steve | Intestate Gas Services, Inc. | Sutherland, Asbill & Brennan |
| Chamberlain, Eric | Los Angeles Dept of Water & Power | Tabors Caramanis & Associates |
| Chevron Company | Luce, Forward, Hamilton & Scripps LLP | Tecogen, Inc. |
| Chris, King | MBMC, Inc. | Tiger Natural Gas, Inc. |
| City of Glendale | MRW & Associates | Tioga Energy |
| City of Palo Alto | Manatt Phelps Phillips | TransCanada |
| Clean Energy Fuels | Matthew V. Brady & Associates | Turlock Irrigation District |
| Coast Economic Consulting | McKenzie & Associates | U S Borax, Inc. |
| Commerce Energy | Merced Irrigation District | United Cogen |
| Commercial Energy | Mirant | Utility Cost Management |
| Consumer Federation of California | Modesto Irrigation District | Utility Specialists |
| Crossborder Energy | Morgan Stanley | Verizon |
| Davis Wright Tremaine LLP | Morrison & Foerster | Wellhead Electric Company |
| Day Carter Murphy | New United Motor Mfg., Inc. | Western Manufactured Housing Communities Association (WMA) |
| | Norris & Wong Associates | eMeter Corporation |