



Brian K. Cherry
Vice President
Regulatory Relations

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

Fax: 415.973.7226

November 19, 2013

Public Utilities Commission of the State of California
Energy Division
Tariff Unit, 4th Floor
505 Van Ness Avenue
San Francisco, CA 94102

Subject: Reply of Pacific Gas and Electric Company to Protests to Advice Letter 4305-E to Revise Electric Rate Schedule NEM and Establish a New Electric Sample Form for NEM for Load Aggregation Pursuant to Senate Bill 594 and Resolution E-4610

Dear Energy Division Tariff Unit:

October 21, 2013, Pacific Gas and Electric Company (PG&E) submitted Advice Letter 4305-E to modify PG&E's Electric Rate Schedule NEM – Net Energy Metering Service and introduce a new appendix to be used with the existing Electric Sample NEM forms pursuant to Senate Bill (SB) 594 and Resolution E-4610.

Récolte Energy, Ecoplexus, Natal Energy, the Agricultural Energy Consumers Association, the Wine Institute, and California Climate & Agricultural Network (collectively the Joint Ag Parties), Solar Energy Industries Association (SEIA), California Farm Bureau Federation (CFBF), Interstate Renewable Energy Council (IREC), and SolarCity filed protests to PG&E's advice letter. PG&E appreciates the thoughtful comments provided by parties to ensure compliance with all provisions of SB 594.

PG&E replies to the protests as follows.

Location of Aggregated Accounts**A. It is Reasonable to Require Aggregated Accounts to be Located on
Parcels Next to the Parcel with the Generator**

Public Utilities Code (PUC) Section 2827 (h)(4)(A) provides the requirements for the location of aggregated accounts relative to the location of the NEM generator. It states: “An eligible customer-generator with multiple meters may elect to aggregate the electrical load of meters located on the property where the renewable electrical generation facility is located and on all property adjacent or contiguous to the property on which the renewable electrical generation facility is located, if those properties are solely owned, leased, or rented by the eligible customer generator.” In addition, PUC Section 2827(4)(F) provides that “For purposes of this paragraph, parcels that are divided by a street, highway, or public thoroughfare are considered contiguous, provided they are otherwise contiguous and under the same ownership.”

PG&E interprets the “adjacent or contiguous” requirement to mean that aggregated accounts must be on parcels that are next to the parcel where the generator is located. This provides for aggregation meters located 1) on the parcel where the generator is located, 2) on any parcel meeting the ownership requirement and that is touching the parcel where the generator is located and, 3) on any parcel that meets the ownership requirement and that would be touching the parcel where the generator is located but for a street, highway, or other public thoroughfare dividing the two parcels. This interpretation is consistent with the statutory requirement because “adjacent” is commonly used to describe an object that is next to or close to another object.¹ Contiguous is more precisely defined and means one object is in actual contact with

¹ Ballantine’s Law Dictionary, 3rd Edition, 1969. Adjacent defined as “Near or close to. A somewhat relative term, sometimes meaning touching or contiguous.{CITE omitted} But clearly not the equivalent of “abutting” in all cases.” See also Black’s Law Dictionary (7th Edition, 1999) “Lying near or close to, but not necessarily touching.”

another object.² In addition, this is a practical approach that meets the statutory requirement and has the added benefit of setting a standard that can be easily described and consistently administered.

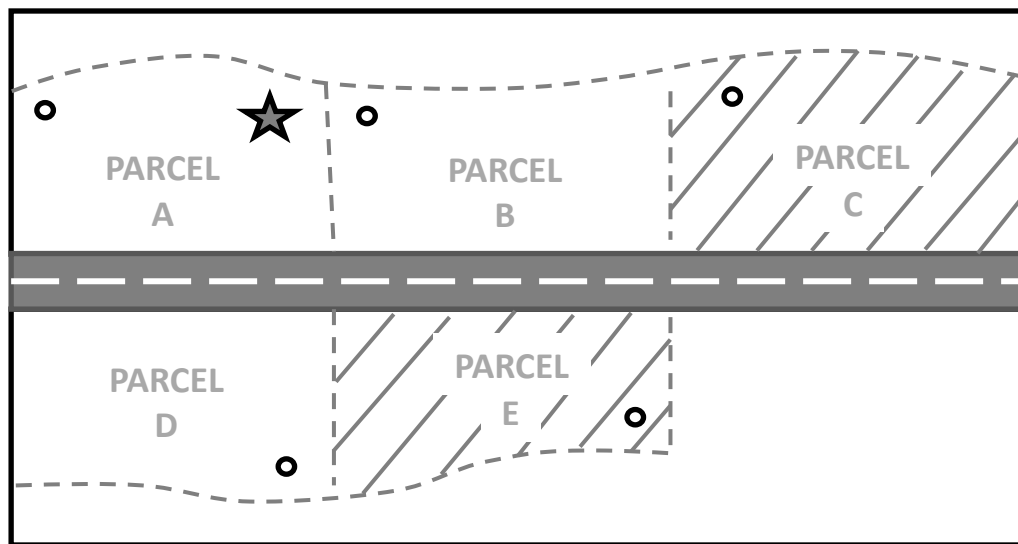
Many parties advocate for a more liberal interpretation of the terms “adjacent or contiguous.” Their focus is not on the term “contiguous” since that has a well-established meaning that includes bordering and actually touching.³ Instead parties point out that the term “adjacent” does not always mean that the two objects in question actually touch. They use this to argue that the distance between the parcel where the generator is located and the parcel where the additional meters may be located should be extended in a variety of ways. What the various proposals from the parties lack is a means to ensure that those parcels continue to meet the requirement that the parcel with aggregated meters is “close to” or “lying near” the generator parcel in all cases.⁴ It is very important that the account aggregation provision stay within the limits established by the Legislature since it provides an exception to the general prohibition on wheeling power to retail customers except as approved by the Legislature.⁵ PG&E’s interpretation of “adjacent” and “contiguous” meets the statutory requirement and should be approved by the California Public Utilities Commission (“Commission”). Below is a sketch illustrating PG&E’s proposal:

² Ballentine’s Law Dictionary defines contiguous as “Literally, in actual contact, and actual touching.” Black’s Law Dictionary provides: “Touching at a point or along a boundary; ADJOINING <Texas and Oklahoma are contiguous>.”

³ Ibid.

⁴ For example, Natal Energy, p. 3, advocates for allowing all parcels in a continuous chain of ownership.

⁵ See PUC section **365.1**. (a): “Except as expressly authorized by this section, and subject to the limitations in subdivisions (b) and (c), the right of retail end-use customers pursuant to this chapter to acquire service from other providers is suspended until the Legislature, by statute, lifts the suspension or otherwise authorizes direct transactions. . . .” Examples of statutory exceptions in addition to the aggregation provision included in PUC section 2827 include PUC section 2829 (EBMUD) and PUC section 2830 (local government renewable energy self-generation program/RES-BCT.) These provisions all include specific requirements and limitations designed to limit or otherwise restrict “freewheeling” of power. Additional constraints may be imposed by CA PUC section 218.



- ★ = RENEWABLE ELECTRICAL GENERATION FACILITY
- = METER
- ⋯ = ELIGIBLE
- ▨ = INELIGIBLE

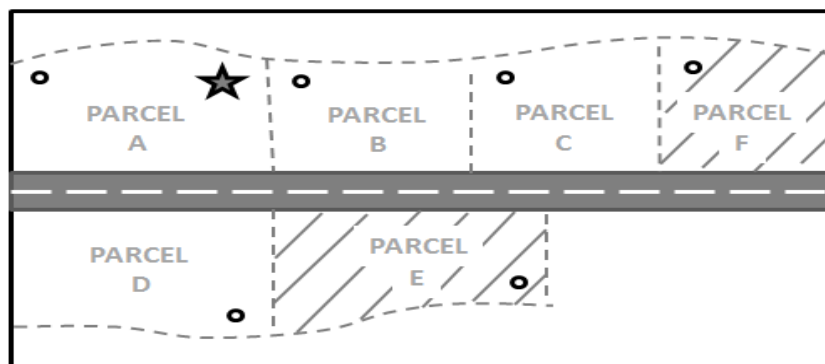
In this example, meters on all parcels have the same customer of record. Meters on Parcels A, B, and D would be eligible for aggregation. Any meters on Parcels C or E would not.

B. Aggregation of Meters Beyond Parcels Next to the Generator Parcel Should Not Be Allowed

PG&E believes the interpretation above is optimal, providing clarity, ease of administration and most closely adheres to Legislative intent. That being said, any extension of eligibility for aggregation beyond parcels next to the parcel where the generator is located should be done with care. As explained above, PG&E strongly supports requiring parcels with aggregated accounts to be next to and, or touching the generator parcel. Several parties propose to extend this one parcel over, from A (generator parcel) to B (touching the generator parcel) and to C (touching B but not

touching A).⁶ This is contrary to legislative intent since under this proposal Parcel B could be quite large, violating the requirement that Parcel A must be “near or close to” Parcel C. Without adopting some potentially cumbersome overall distance limitation, the A,B,C proposal is flawed.

If the Commission rejects PG&E’s position and chooses to adopt the “A, B,C proposal” it is important to require that all three parcels, A,B,C, have the same ownership requirement consistent with PUC Section 2827, that the properties are all “solely owned, leased, or rented by the eligible customer generator.”⁷ While even with this requirement there may be outliers, this would help ensure that any hopscotch of eligibility is limited. In addition, only meters on parcels that would otherwise be touching the generator parcel should be eligible if the parcel is located across a street, highway or other public thoroughfare in order to be in compliance with PUC Section 2827(4)(F). Below is a modified sketch showing the additional parcel “C” that would be included under this interpretation while parcels “E” and “F” would be ineligible:



- ★ = RENEWABLE ELECTRICAL GENERATION FACILITY
- = METER
- (dashed) = ELIGIBLE
- ▨ (hatched) = INELIGIBLE

⁶ Natal Energy Protest, p. 1; Ecoplexus Protest, p.1; Joint Ag Parties, p.2; SEIA protest, p.2; CFBB, p.3; IREC, p.6; SolarCity p.4

⁷ PUC section 2827(h)(4)(A).

Billing Credits and Calculations

In compliance with the statute, PG&E proposed a billing methodology that calculates the proportional allocation of kilowatthours (kWh) based on each account's individual consumption compared to the total consumption of the NEM Aggregation arrangement as a whole, for each billing period.⁸ Récolte Energy (Récolte) protested PG&E's proposed billing methodology since it may result in some meters receiving excess kWh at the end of the 12-month Relevant Period. Récolte expressed concern that some accounts in the NEM Aggregation arrangement may be net consumers while others may have excess generation that per the statute is forfeited to the utility⁹. Récolte proposes an alternate billing methodology that uses the cumulative consumption and generation since the start of the current Relevant Period, in lieu of basing the proportionate monthly allocation on a single month's consumption and generation. The Farm Bureau and SolarCity support Récolte's proposal.¹⁰

Récolte's proposal is an attempt to maximize the customer benefit. However, allocating kWh between meters after adjusting for cumulative allocations made in prior billing periods is not within the statute. SB 594 clearly states that the "proportionate allocation shall be computed each billing period".¹¹ In addition, there are aspects of the Récolte proposal that will further complicate the billing; namely, the carrying over of usage (kWh) to subsequent months in which the usage may be valued at a different rate due to changing seasons or other factors such as differing tiers. This is because Récolte proposes to allocate kWh generation without accounting for the basic NEM billing principle that usage (kwh) is valued based on the applicable rate and taking into account the actual usage within the month the generation was produced. An issue occurs when a meter with high winter energy usage, for example, carries over high allocations during summer months until true-up, or vice versa. By moving the usage of

⁸ Cf. PUC section 2827(h)(4)(C)

⁹ Récolte Energy's Protest at pp. 2-3

¹⁰ Farm Bureau Protest at pp. 4-5, and SolarCity Protest at pp. 6-7

¹¹ Cf. PUC section 2827(h)(4)(C).

“Meter 1” to the winter months, the generation that “Meter 1” receives is more valuable in June, July, and August than in March. Even though the total usage/generation at the end of the year may equal out, the generation/usage is valued at a higher rate in the summer months. Récolte’s method appears to have the goal of equally allocating kWh cumulatively over the course of the year while the NEM billing is based on usage valued at a TOU period and Tier rate structure within the month the generation is produced. This would sometimes work in favor of the customer but in other cases it may not. There is a possibility that for some the “fix” proposed by Récolte would not be as beneficial as monthly values. In other cases it may inappropriately increase the cost shift from the NEM customer to other customers.

Given the complexity and uncertainty, PG&E believes it would be imprudent to adopt an alternate method that is not consistent with the statute. For these reasons PG&E urges the Commission to approve PG&E’s tariff as filed. If the Commission has concerns, PG&E would support a workshop to further review proper billing methodology.

In response to the proposal by Ecoplexus and IREC¹² to have different billing methods based on rate schedules, PG&E opposes this approach as it adds complexity to the billing of NEMA and would adversely impact the cost of implementation contrary to the effort to avoid cost shifts.

PG&E opposes the SEIA¹³ proposal for another reconciliation at end of the Relevant Period since kWh cannot be credited equitably due to a difference in rate schedules and generation value. In addition, the SEIA proposal is not supported by the legislation.

¹² Ecoplexus, p. 2; IREC, p. 5-6

¹³ SEIA, p. 3-4

Service Charges

Several parties' commented on the proposed IOU service charges¹⁴. PG&E's costs are reasonable given the additional work required to set up and bill a NEM Aggregation customer. PG&E's proposed fees represent 100 percent of the incremental costs of providing billing services for NEM meter aggregation under a manual billing solution. However, PG&E does not include any IT costs to automate the billing at this time, nor does it include future labor costs.

NEM meter aggregation will leverage existing NEM system capabilities for account set-up. However, the additional manual effort required to establish a relationship between a generator account and each aggregated account during the set-up process results in an incremental cost of \$4 per account.

Currently, there is no automated billing solution, due to the unknown universe of NEM Aggregation customers. Customers choosing NEM Aggregation will have their monthly generation percentages and allocations calculated and billed manually. Further, any usage data revision for an aggregated account will effectively impact the generation percentages and allocations to all aggregated accounts, leading to additional manual effort. This results in an incremental cost of \$15 per account¹⁵.

Some parties compared NEM Aggregation to Virtual Net Metering (VNM/NEMV)¹⁶, but the system capabilities that are specific to VNM/NEMV cannot be leveraged for use for NEM Meter Aggregation. In addition, the cost to implement an automated billing solution for VNM/NEMV was borne by ratepayers through the California Solar Initiative (CSI) Program, and the cost of NEM Aggregation billing must be borne by the participants.

¹⁴ Ecoplexus, p.3; CFBF, p.6; SEIA, p.5; SolarCity, p.2

¹⁵ This is based on PG&E's proposed tariff. If the billing methodology is modified as proposed by parties, this may need to be adjusted upwards

¹⁶ Ecoplexus, p.2; CFBF, p.6; IREC, p. 4; SolarCity, p.2

Implementation Period

PG&E requested an effective date of 120 days from the approval date of the advice letter. Multiple parties¹⁷ protested and suggested that the effective date be 30 days.

One hundred twenty days is necessary to allow time to modify internal systems and build new processes for the successful implementation and rollout of the NEM Aggregation (NEMA) tariff. The interest in NEMA is indicative of the expected volume of applications that will be submitted under the new tariff. System modifications on the interconnection side and a new billing process are required to ensure that the responsible teams are well-equipped to handle customer requests. In one particular instance, a potential customer would be applying under NEMA for multiple accounts with a total of 154 meters, and PG&E needs to create effective processes to better serve such customers.

Existing NEM customers may elect to transition to NEMA as soon as it becomes available and PG&E has already received inquiries about this option. The proposed billing methodology is complex and unique to the NEMA tariff and will not be available immediately if the tariff goes into effect as suggested by the protesting parties. The additional time is also needed for a website refresh and to build a robust training calendar for internal and external stakeholders. Educating customers on the NEMA requirements and process before the effective date is of utmost importance in order to ensure timely enrollment and customer satisfaction with the NEMA program.

¹⁷ Joint Ag Parties, p.3; CFBF, p.6; SolarCity, p.7

NEM Cost Tracking

In their protest to PG&E's filing, IREC recommended that interconnection costs be tracked in the five cost categories¹⁸:

- **Transformers:** PG&E plans on tracking these costs within the distribution system upgrade cost category
- **Secondary wires:** PG&E plans on tracking these costs within the distribution system upgrade cost category
- **Technical analysis time:** PG&E plans to track these costs on a programmatic (not project) level for all NEM interconnection requests
- **Distribution system upgrades:** PG&E plans to track these costs on a project level for all NEM interconnection requests
- **Administrative and general costs:** PG&E plans to track these costs on a programmatic (not project) level for all NEM interconnection requests

CSI Application Treatment

While SEIA requests that CSI treatment of NEM Aggregation customers with multiple CSI Applications be resolved within the NEM tariff,¹⁹ the tariff is not the appropriate place. CSI changes are subject to Senate Bill (SB) 1 limits and the CSI Handbook.

PG&E looks forward to continuing to work with the Commission, the other IOUs, and interested stakeholders in ensuring the successful implementation of SB 594.

Sincerely,

Handwritten signature of Brian Cherry in cursive script.

Vice President, Regulatory Relations

¹⁸ IREC Protest, p. 7

¹⁹ SEIA, p. 6

cc: Karen Norene Mills, for California Farm Bureau Federation
John Gorman, for EcoPlexus, Inc.
Thadeus B. Culley, for Interstate Renewable Energy Council, Inc.
Jason B. Keyes, for Interstate Renewable Energy Council, Inc.
Michael Boccadoro, for Agricultural Energy Customers Association
Tim Schmelzer, for Wine Institute
Jeanne Merrill, for California Climate & Agriculture Network
Eric Thompson, for Natel Energy, Inc.
Gopal Shanker, for Récolte Energy
David R. Wooley, for Solar City
Jeanne B. Armstrong, for Solar Energy Industries Association
Gabe Petlin, CPUC Energy Division