Pacific Gas and Electric Company

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February 29, 2012

Mr. Honesto Gatchalian
Energy Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Re: PG&E's Reply Comments on Draft Resolution E-4481

Dear Mr. Gatchalian:

Pursuant to Rule 14.5 of the Rules of Practice and Procedure of the California Public Utilities Commission ("Commission"), Pacific Gas and Electric Company ("PG&E") hereby submits its reply comments on Draft Resolution E-4481 ("DR") issued on February 6, 2012, regarding PG&E's Advice Letters (AL) 3902-E, 3902-E-A and 3902-E-B. PG&E submits these reply comments in a timely manner on February 29, 2012, as requested in the cover letter to the draft resolution.

Introduction

In response to Decision (D.) 11-07-031, Ordering Paragraph (OP) 2, PG&E (and the other investor-owned utilities) submitted Tier 2 advice letters containing modifications to the Net Energy Metering (NEM) tariffs to allow Virtual Net Metering (NEMV or VNM) to apply to multi-tenant customers, with the limitation that sharing of bill credits can only occur for accounts served by a single service delivery point. DR E-4481 proposes to modify portions of the utility advice letters.

On Friday February 25, 2012, PG&E submitted comments on the DR E-4481. Other comments were received from:

- Bloom Energy Corporation and ClearEdge Power (Bloom/ClearEdge)
- California Farm Bureau Federation (CFBF)
- California Center for Sustainable Energy (CCSE)
- Everyday Energy
- The Interstate Renewable Energy Council, Inc (IREC), the Vote Solar Initiative, California Solar Energy Industries Association and Récolte Energy. (Joint VNM Parties)
- San Diego Gas and Electric (SDG&E)
- Southern California Edison (SCE)

PG&E appreciates the opportunity to reply to certain issues raised in the comments received from the above parties.

1. The Service Delivery Point Discussion Should Not Be Changed.

The Joint VNM Parties propose a major change to the discussion of Service Delivery Point or SDP in Draft Resolution E-4481. This change should be rejected by the Commission as (A) it is inconsistent with D.11-07-031; (B) it is inconsistent with the established tariff definition of the term "Service Delivery Point"; and (C) it would contravene current statutory limitations on retail wheeling of electricity.

The Joint VNM Parties propose to:

- Define the SDP as "the point at which a service extension from the utility's grid crosses the property line where the eligible Generating Account and Benefiting Accounts are located."[1]

A. The Proposed Change Is Inconsistent With D. 11-07-031.

The Joint VNM Parties assert in their Comments that "[u]nder the framework currently being advanced, a single property with multiple buildings could be seen as having multiple SDPs even though there is only one line extension serving the property from the larger, general distribution system. The … Parties submit that such an understanding of SDP is inconsistent with the understanding parties had when discussing the SDP issue in comments leading up to D.11-07-031."[2] However, the record in this proceeding does not support this assertion.

Section 4 of D.11-07-031, which can be found on pages 5-22 of the decision, provides a lengthy and clear discussion of the SDP. The following excerpts from this section demonstrate a clear understanding of the definition of SDP at the time the Decision was issued:[3]

- "Many multifamily affordable housing projects are actually comprised of ***multiple buildings on a single property*** [emphasis added], or on multiple parcels extending across the equivalent of several city blocks but under the same ownership. These housing complexes are often served by multiple utility "service delivery points" (SDPs)."[4]

  "The SDP is defined in utility practice as the demarcation between the customer-owned electrical system and the utility distribution system. Typically, ***each multi-tenant***

[1] Joint VNM Parties comments, p. 7.
[2] Joint VNM Parties comments, p. 3.
[3] Comments from CFBF and CCSE on the Draft Resolution also reflect a clear understanding of the SDP limitation. CFBF acknowledges that "each service line extending from the utility's grid to the …property should create a single SDP…" [CFBF comments, p. 2]. CCSE suggests that there is some lingering confusion regarding "what specifically constitutes the 'service delivery point' [CCSE comments, p. 3]. However, their comments also reflect their understanding that the provision allowing a NEMVMASH "multi-building/multi-meter property owner to share credits… across different meters in the property" does not currently apply to expanded NEMV sites, and they simply request that the Commission consider "a broader definition of a 'site'… in the future", rather than calling for a revised definition of SDP. [CCSE comments, p. 3].
[4] D.11-07-031, p. 6.

building has one SDP [emphasis added] that then serves multiple tenants or utility accounts."[5]

- "[T]he Staff Proposal recommended that the Commission should determine that the SDP is not the proper boundary for VNM tariffs for affordable housing projects. Instead, the Staff Proposal recommends the Commission clarify that ***VNM should be available to the entire affordable housing development, not just the units behind a single SDP*** [emphasis added]… "[6]

Several parties, including many of the parties that now make up the Joint VNM Parties, supported the Staff Proposal, essentially making the same argument they make here about the impact of this limit on multi-tenant properties. For example, the CPUC decision noted that IREC argued that the CPUC should allow contiguous parcels "managed as part of the same development" to participate in NEMV and that use of the grid would be so minimal as to "hardly warrant a charge on the bill."[7] Similarly, the decision noted that Joint Solar Parties argued that "there are ways to mitigate wheeling concerns by limiting sharing to VNM credits to a **geographically confined area**, rather than imposing an overly restrictive SDP Boundary."[8]

The CPUC expressly mentioned and then rejected these arguments, and PG&E's NEMV tariff, which is the subject of Draft Resolution E-4481, is fully responsive to the Commission's ordering language in D.11-07-031.[9] Specifically, Ordering Paragraph 2 of the decision limits "the sharing of bill credits" for non-MASH NEMV customers to "accounts served by a single service delivery point" or SDP. Further, the discussion in section 4 of the decision clearly expresses the Commission's intent with regard to the SDP limitation for non-MASH NEMV customers:

- "Staff recommends that the Commission expand VNM to all multi-tenant or multi-meter customers – namely residential, commercial, and industrial customers – not merely those that qualify for the MASH program, as long as the customers who receive the credits are all behind the same utility SDP."[10]

- "If we expand VNM, this will allow residential, commercial, and industrial customers who now fund CSI through their rates to receive the benefits of the installation of a solar energy system and net energy metering. We will limit the expansion to those customers served by a single SDP."

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[5] D.11-07-031, p. 6.
[6] D.11-07-031, p. 7.
[7] D.11-07-031, p. 14.
[8] D.11-7-031, p. 16 (emphasis added).
[9] "Within 60 days of the effective date of this decision, Pacific Gas and Electric Company, Southern California Edison Company and San Diego Gas and Electric Company (collectively, the utilities) shall each file Tier 2 advice letters containing modifications to their Net Energy Metering tariffs to allow Virtual Net Metering (VNM) to apply to all multi-tenant and multi-meter properties, with the limitation that sharing of bill credits can only occur for accounts served by a single service delivery point that receive a full retail rate credit unless the customer is a Multifamily Solar Housing Program participant." [Ordering Paragraph (OP) 2, D.11-07-031].
[10] D.11-07-031, pp. 13-14.

B. The Proposed Change Is Inconsistent With The Established Tariff Definition Of The Term Service Delivery Point

The Joint VNM Parties request for an alternative definition of Service Delivery Point effectively requires that utilities reclassify distribution conductors as service conductors for the purpose of allowing expanded sharing of generation credits to multiple buildings. In addition to being beyond the scope of Resolution E-4481, this proposal would be in direct conflict with existing tariff language, which among other things, clearly defines a Service Delivery Point as the termination point of Service Facilities, and a Distribution Line as one which supplies two or more facilities.[11]

What the Joint VNM Parties are effectively requesting in their Comments is a revised definition of the term "Service Delivery Point" in order to expand the sharing of generation credits beyond what is currently permitted pursuant to D.11-07-031. The Joint VNM Parties' suggestion that the Commission draw a distinction between the "one line extension serving the property from the larger, general distribution system" is in direct conflict with the definitions of distribution and service extensions that are established in the utilities' line and service extension tariffs. Currently, the tariffs do not contain a separate designation for distribution lines that are on private property and those which are upstream of the property line.

In support of their request, the Joint VNM Parties also assert that "the property owner pays for the installation of distribution extensions serving other buildings on their property…." This assertion is incorrect. Pursuant to PG&E's Electric Rule 15, the costs of a distribution line extension on private property are shared by PG&E and the Applicant for service, as provided in Rule 15.C.[12] Ongoing maintenance, repair and replacement of this line resides entirely with PG&E.

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[11] "Service Delivery Point" is defined in PG&E's Electric Rule 16 as the point at which "PG&E's Service Facilities are connected to either Applicant's conductors or other service termination facility designated and approved by PG&E." [Electric Rule 16.H]

"Service Extension" is defined in Electric Rule 16 as "the overhead and underground primary or secondary facilities (including but not limited to PG&E-owned Service Facilities and Applicant owned service facilities) extending from the point of connection at the Distribution Line to the Service Delivery Point". [Electric Rule 16.H]

"Distribution Lines" are defined in Electric Rule 16 as "PG&E's overhead and underground facilities which are operated at distribution voltages as set forth in PG&E's Rule 2 and which are designed to supply two or more services." [Electric Rule 16.H]

"Service Facilities" are described in the Applicability Section of PG&E's Electric Rule 16 as facilities "that extend from PG&E's Distribution Line facilities to the Service Delivery Point…" and are further defined in Rule 16.A. to include: "(a) primary or secondary underground or overhead service conductors, (b) poles to support overhead service conductors, (c) service transformers, (d) PG&E-owned metering equipment, and (e) other PG&E-owned service related equipment."

[12] Rule 15.C.1 states in pertinent part: "PG&E will complete a Distribution Line Extension without charge provided PG&E's total estimated installed costs do not exceed the allowances from permanent, bonafide loads to be served by the Distribution Line Extension within a reasonable time, as determined by PG&E. The allowance will first be applied to the Residential Service Facilities, in accordance with Rule 16. Any excess allowance will be applied to

C. The Proposed Change Contravenes Current Statutory Limitations On Retail Wheeling Of Electricity

The legislature has substantially limited the availability of retail wheeling. New residential customers cannot participate in direct access, and non-residential customers can participate only to the extent they fit within the cap enacted by the legislature. This issue was identified and briefed prior to the issuance of D.11-07-031, and the Commission acknowledged the concern,[13] recognizing that the NEMVMASH program "contains limiting language to reduce the extent to which such wheeling would occur."[14] Sharing generation credits upstream of the point of service connection utilizes utility assets for the purpose of retail wheeling, irrespective of any attempt to redefine the term Service Delivery Point.

Customers also are not restricted from receiving solar power by this policy – they have other options, such as connecting a given solar project to several different buildings with more than one inverter; or in some cases, rearranging the distribution facilities on their properties, properties; or alternatively, purchasing PG&E's distribution facilities in order to achieve a delivery option they desire.

2. No Special Service Delivery Point Treatment Should Be Provided To Farm or Ranch Operations.

The CFBF in its comments[15] argues that, "The construct underlying VNM, to be able to offset usage from multiple electric accounts against a single customer-owned generation facility, is of keen interest to the agricultural community. By virtue of their operational construct, electric meters for farm and ranch facilities are geographically dispersed. VNM, if properly developed, would create opportunities for optimum siting of renewable net metered generation facilities for agricultural operations, since the most appropriate site for a project does not necessarily match the most appropriate account." However, the CPUC adopted a single delivery point for all NEMV customers, other that Multifamily Solar Housing Program participants. It did not create different rules for Ranches and Farms.

Moreover, this argument illustrates the reasonableness of PG&E's concern about the absence of a definition for "multi-meter." If the intent of including multi-metering is to circumvent the single service delivery point requirement, then it directly violates D.11-07-031. Moreover, it enables customers to make use of the utility distribution system without compensation, which the CPUC expressly rejected. The service delivery point must remain a fundamental portion of the

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the Distribution Line Extension to which the Service Extension is connected. The allowance for non-residential applicants will be applied to the combined refundable cost of the Distribution and Service Extensions."

[13] Pages 10 and 15 of D.11-07-031 mention retail wheeling arguments made by PG&E and SCE, and states **"**PG&E raises valid concerns over wheeling and the use of the transmission and distribution grid." [D.11-07-031, p. 12]

[14] D.11-07-031, p. 12.

[15] CFBF, p. 1, paragraph 1.

NEMV program. Undefined "multi-meter" arguments must not be allowed to evade the Commission's direction.

3. Site Assessment Fees Should Be Approved.

SCE's comments explain why Site Assessment Fees should be included in the tariff. Site assessments are necessary in all cases to ensure the safety of PG&E's distributions system, its employees and its customers. Without such an inspection, PG&E cannot accurately ascertain the type, vintage and the condition of equipment at the customer premise. Housing stock in the Bay Area can be quite old with service panels from the 1920s, '30s or '40s. Service panels were installed to different standards than current new construction. Some of these differences include adequate wiring clearances, which affect whether or not equipment can be safely installed without upgrading the panel and whether or not customer equipment may need to be situated on the PG&E side of the meter to make a cost-effective interconnection.

To illustrate some of the issues, consider line side taps made within PG&E sealed termination sections of the panel. Such taps are considered variances that require pre-approval - they must be approved by PG&E's Electric Meter Engineering department.

Beyond cost, safety is of paramount concern to PG&E and to our customers. Everyday Energy's suggestion that it might be acceptable to work on an energized circuit clearly expresses the reason why a site assessment is necessary. Performing a site inspection to identify an appropriate interconnection point is an important component of PG&E's safety protocol for virtual net energy metering projects where the generating equipment is being interconnected to existing rather than new facilities. Typically, Generation Interconnection Service, Advanced Metering, Service Planning, and, at times, Construction may need to be involved to ensure the interconnection is as safe and effective as possible.

PG&E wishes there was some shorthand assessment to determine how best to perform the interconnection that could be applied without a PG&E field visit and visual inspection. This is not the case so far with virtual net energy metering given the variability in equipment facilities and conditions at the customer premises. Therefore, PG&E believes it must incur the costs to perform a site assessment in all cases and that the site assessment fee proposed in its tariffs is well justified.

4. If NEMV Credits Must Be Reallocated, They Should Be Allocated To A Single Common Area Account.

SCE and SDG&E both stated that if the Commission determines it is necessary to create a standard reallocation treatment for unallocated credits, the most cost-effect implementation would be to allocate any such credits to a single common area account. PG&E agrees.

5. CCSE's Arguments That The Costs of Implementing NEMV Be Recovered In "Future Rates" Should Be Rejected.

CCSE argues that little or none of the costs of implementing NEMV be collected from the customers causing such costs. In particular, it requests that all costs incurred subsequent to the effective date of D.11-07-031 should be recovered independent of CSI, in the IOUs future rates. CCSE Comments pp. 2-3. CCSE argues that, "We note that NEM customers are not charged for NEM billing and therefore respectfully inquire as to why the IOUs may charge VNM customers for billing. We understand the IOUs' need to recover costs, and while it may be appropriate to recover some of those costs directly via the VNM customer, some costs should be rate based, as appropriate." CCSE fails to understand that NEM customers are not subject to allocation requirements that have to be managed; and they are not subject to periodic re-allocations of credits due to frequent changes in tenants; a NEM receives 100% of the benefit for their solar, very simply. This is not the case with NEMV. There is no reason why these additional costs, beyond what is already covered for NEM and VNM alike, should be socialized and D.11-07-031 expressly permitted the IOUs to include such a fee in the VNM tariffs.[16]

One example is the fees for modifying NEMV allocations. As explained in PG&E's opening comments, the billing complexity and cost associated with automating the proposed rule in the DR of no charge for the first modification in each 12 month period, and keeping track of how many modifications have occurred in the year, is counterproductive to streamlining the allocation process. PG&E much prefers a simple rule, with a single tier charge for the service. This minimizes the cost of billing, the instance of bill error and the ease of implementation. These costs should be borne by the customers causing these costs.

6. Non-Renewable Fuel Cells Are Not Eligible For NEMV.

Bloom Energy/ClearEdge argues that both non-renewable and renewable fuel cells should be eligible for NEMV. Fuel cells fueled by renewable fuel will be eligible for ordinary NEM, and so will be eligible for NEMV when the NEMV tariffs are updated to reflect the expanded technologies covered by SB 489. However, the claim of Bloom/ClearEdge that non-renewable fuel cells should qualify for NEMV is at odds with D.11-07-031, which says NEMV is only available for DG technology receiving a full retail credit (pp. 17, 65, OP 2). Non-renewable fuel cells only get a generation credit under Public Utilities Code section 2827.10(e). The decision expressly stated that, "fuel cell NEM customers do not receive a full retail credit. Thus, … fuel cell NEM customers would not be eligible for the VNM program." D.11-07-031, p. 17. Under the decision this resolution is implementing, these projects do not qualify.

7. Duplicative CSI & Revenue Metering Is Not Needed.

PG&E agrees with the Commission's draft decision to leave the VNM tariff unchanged with regard to the CSI Performance Based Incentive (PBI) meter changes. The Joint VNM Parties' comments on changing the PBI Metering requirements in the CSI program are out of scope for

[16] D.11-07-031 p.18.

this discussion. Any incentive program changes should be addressed by the respective Energy Division staff and Program Administrators. The inclusion of incentive program requirements in the tariffs creates unnecessary complications when future changes are considered for the incentive programs.

Joint VNM Parties argue that customers who are both participating in PG&E's NEMV tariff and receiving CSI Performance Based Incentive (PBI) payments do not need separate net generation output meters (NGOM) for reporting generation for billing and for calculating PBI payments. The CSI Program eligibility for NEMV participants requires further review and potentially may undergo additional program changes. PG&E agrees, and supports opportunities to create efficiencies and reduce costs, if NEMV customers qualify for the CSI program.

PG&E currently employs a similar method of using a single NGOM for customers both participating in NEMMT[17] and receiving CSI PBI payments. Under this arrangement, the utility owns the meter, as it is standard practice for utilities to own the meter used for customer billing. PG&E could adopt a similar practice for NEMV, where the utility-owned NGOM could be used for billing customers and issuing CSI PBI payments, if it is determined that NEMV customers are eligible for the CSI program. The discussion and details of the CSI Program eligibility and metering requirements should be addressed in the CSI Program Handbook, separately from the VNM tariff.

8. The Draft Resolution Is Incorrect In Stating That The Billing Infrastructure For RES-BCT Has Already Been Established.

SCE points out that the Draft Resolution states that "All the utilities have established automated billing systems that can handle VNM monthly billing arrangements based on previous investments made to establish billing infrastructure for VNM MASH **and RES-BCT**. The fixed costs for VNM billing infrastructure have been expensed to the CSI general market program administration budgets, per D.08-10-036." [18] In fact, PG&E has not yet completed the programming for RES-BCT.

9. Meter Charges Should Not Be Revised For PG&E.

Everyday Energy expressed a variety of complaints about various meter charges it claims it has received from SDG&E. PG&E is unable to respond to these issues as the examples are all referencing interconnections outside our service territory. However, Everyday Energy's proposed solution is that meter charges should become uniform among utilities. This suggestion should not be adopted. Meters are not necessarily uniform among utilities. Moreover, utility charges for both meters and interconnections are governed by utility-specific tariffs. The charges

[17] NEMMT refers to a multiple tariff interconnection option. This provision allows at least one net energy metered eligible generation facility to be interconnected with either one or more other net energy metered eligible generation (subject to different tariff treatment) or a non-net energy metered generating facility behind the same customer meter.

[18] DR pp. 22 & 23, emphasis added.

for output meters in PG&E's area should be governed by costs in the proposed NEMV tariff for TOU metering and meter charges in the customer's otherwise applicable rate schedule, the language is based on similar language in the NEMVMASH program. These provide the "just and reasonable" cost for the metering that Everyday Energy seeks. There is no need to amend the Draft Resolution as proposed by Everyday Energy.

10. There Should Be No Change To The Tariffs Concerning Charges To Energize and De-energize Property for NEMV.

Everyday Energy claims that there should be no charges to energize and de-energize property for NEMV if conducted during regular business hours. PG&E appreciates that Everyday Energy recognizes that a de-energize/re-energize process is important for safety reasons. This activity is governed by existing tariffs (in this case Rule 16), and there is no reason to amend Conclusion 12 as requested by Everyday Energy.

PG&E notes in passing a couple of statements by Everyday Energy that are not true. First, it is incorrect to assume that the costs of a site visit consist only of the actual time at the site. Costs of a site visit include travel time; use of PG&E assets (trucks and other equipment); and scheduling and customer communications. Everyday Energy's estimate of the costs would severely underestimate them. Second, Everyday Energy claims that NEMV is net metering within the meaning of PUC Section 2827(b)(6). It is not.

Under PG&E's existing tariffs, there are various cost scenarios for a disconnect/reconnect, including one where there is "no charge". However, there are charges in other circumstances. This policy is consistent with that for all customers, regardless of the whether it is for generation or another reason. In addition, for the NEMV taps, the field work typically will require inspection by the local jurisdiction to verify compliance with the approved variance (entry point, landing locations). PG&E needs to be present during that inspection, as often some of their facilities are involved (for example, when a line side tap is allowed). No change should be made to these tariffs.

Summary and Conclusion

PG&E respectfully requests that the Commission adopt the above changes recommended by PG&E.

Sincerely,

Brian Cherry/SAB

Vice President - Regulation and Rates

cc: Director, Energy Division – Ed Randolph – efr@cpuc.ca.gov
Paul Phillips, Program Supervisor, Energy Division – psp@cpuc.ca.gov
Gabriel Petlin, Energy Division - gp1@cpuc.ca.gov
Amy Reardon, Energy Division - amy.reardon@cpuc.ca.gov
Melicia Charles, Energy Division – mvc@cpuc.ca.gov
Service List (R.10-05-004)

Enclosure: Certificate of Service

CERTIFICATE OF SERVICE

I certify that I have by mail, e-mail, or hand delivery this day served a true copy of Pacific Gas and Electric Company's reply comments on Draft Resolution E-4481, regarding PG&E's Advice Letter 3902-E (as amended by Advice Letters 3902-E-A and 3902-E-B) on:

1) Edward Randolph – Director, Energy Division
2) Paul Phillips, Program Supervisor, Energy Division
3) Gabriel Petlin, Energy Division
4) Amy Reardon, Energy Division
5) Melicia Charles, Energy Division
6) Honesto Gatchalian – Energy Division
7) Service List R.10-05-004

/S/ GREG BACKENS
Greg Backens
PACIFIC GAS AND ELECTRIC COMPANY

Date: February 29, 2012