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ED Tariff Unit
Energy Division
California Public Utilities Commission
505 Van Ness Avenue
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Submitted electronically to EDtariffunit@cpuc.ca.gov

Subject: Reply Comments of Pacific Gas and Electric Company on Draft Resolution E-4610

Dear Energy Division Tariff Unit:

Introduction

Pacific Gas and Electric Company ("PG&E") appreciates the opportunity to file reply comments on Draft Resolution ("DR") E-4610, "Commission determination authorizing investor owned utilities to implement net energy metering ("NEM") aggregation pursuant to Senate Bill ("SB") 594 (Wolk, 2012)". These reply comments are submitted in a timely manner in accordance with the directions received in the August 27th email from Nicholas Castillo.

SB 594 allows NEM customers with multiple meters potentially on multiple parcels to aggregate these loads, provided the California Public Utilities Commission ("Commission" or "CPUC") first makes a finding that such aggregation will not result in "an increase in the expected revenue obligation of customers who are not eligible customer-generators." Draft Resolution E-4610 if adopted would make that finding.

Unfortunately, for a number of reasons discussed in detail in PG&E's opening comments, the CPUC has not established the record or program terms necessary for the proposed finding of no cost shift due to the adoption of aggregation. For this reason, PG&E has suggested the CPUC either develop further analysis that could support such a finding in an appropriate existing proceeding, or that it make a finding that it is not authorized to expand the NEM program in this manner at this time.

Opening Comments were received from (i) El Dorado Irrigation District ("El Dorado"), (ii) Solar Energy Industry Association ("SEIA"), (iii) the California Farm Bureau Federation ("CFBF"), (iv) Southern California Edison Company ("SCE"), (v) California Energy Storage Alliance ("CESA"), (vi) the City of San Diego ("San Diego"), (vii) the Interstate Renewable Energy Council, Inc., ("IREC"), (viii) San

Diego Gas & Electric Company (“SDG&E”), (ix) Vote Solar Initiative (“Vote Solar”), (x) and the Division of Ratepayer Advocates (“DRA”), in addition to PG&E’s own comments.

Many of the items brought up by other parties were already addressed in PG&E’s opening comments. However, there are several new items that PG&E addresses in this reply.

IREC and Vote Solar’s References to the Crossborder Study Should Not be Considered

Both IREC and Vote Solar cite¹ a recent study by Crossborder Energy (funded by Vote Solar) that purports to “update” the previous E3 analysis of the cost of customer solar installations. The Crossborder study should not be relied on by the CPUC in addressing NEM Aggregation, both because it is a one-sided examination from a solar program participant perspective and because the study has never been subject to any CPUC review or cross-examination. Further, the Crossborder study is deeply flawed for the following reasons:

1. The Crossborder study only examines the costs associated with exports to the grid from the customer’s solar installation, rather than the impact on rates of other customers of the total output from the generator. As the Legislature has made clear, rate impacts on other customers should consider all generation.²
2. The Crossborder study “updates” the E3 avoided cost calculator by including some more recent gas price forecasts, but fails to include the *most* recent gas forecast (which would have lowered avoided costs).³
3. The Crossborder study removes the resource balance year from the E3 study, assuming avoided generation capacity costs from the year of installation. This significantly overstates the avoided cost from solar installations, given that there is over-generation existing today and that for the foreseeable future the only new generation resources that will be needed will be flexible generation (which customer solar installations cannot avoid).
4. The Crossborder study gives Renewable Portfolio Standard (“RPS”) value to *all* of the generation from the solar installation (including that generation that offsets the customer’s own load). This ignores the fact that customer generation does not count toward the utility RPS obligation, and that it only acts to reduce the customer’s load (which will reduce the utility’s RPS obligation by the relevant amount, i.e., 20% in 2012, 33% in 2020, etc.). It also ignores the fact that for most residential and many nonresidential installations that are participating in a power purchase agreement or lease arrangement, the Renewable Energy Certificates has been severed from the power being generated and is retained by the solar installer.

PG&E fully expects that the current NEM cost benefit analysis being conducted by E3 under contract with the CPUC will clearly demonstrate that the cost shift both for residential and nonresidential customers continues.

¹ Vote Solar Comments, Footnote 1; IREC Comments, page 3, Footnote 3.

² AB 2514 (Bradford, 2012); Commission Decision 12-05-036.

³ Beach and MacGuire, “Evaluating the Benefits and Costs of Net Energy Metering for Residential Customers in California”, prepared for Vote Solar by Crossborder Energy, October 2012, page B.1-1.

IREC Forecasts About the “Frozen” NEM Cap

IREC argues that the CPUC evaluation of the cost shift should assume that the NEM cap is relevant and that the CPUC should only consider the NEM program as it exists on or before September 30, 2013. IREC bases its argument on a statement in the Senate Floor Analysis referring to a one-time cost of about \$150,000 for the CPUC to perform a study. This is a misleading conclusion to draw from a statement that simply recognizes that the CPUC will expend funds doing the required analysis. The Legislature required the CPUC by September 30th to examine the effects of implementing SB 594, which obviously means the CPUC should look for any increase in the cost-shift in the future, not a frozen present. There is simply no zero-sum game in NEM where every additional MW of nonresidential solar means one less MW of residential installations. The record shows that the NEM cap is raised every single time there is any likelihood that it will be reached. Additional MWs installed under SB 594 are MWs that likely would not have been installed without the aggregation feature.

SB 594 Addresses NEM-eligible Generators Only, It Does Not Address Storage

CESA comments that, “the same aggregation of load should be allowed to suffice for the determination of premise load when sizing energy storage installations.” SB 594 and thus this DR relates only to NEM eligible generators. To the extent that storage is included in the definition of a “NEM eligible generator” this would apply, but otherwise there is no broader applicability for storage in general included in SB 594. CESA’s proposed change should not be included.

Claims that SB 594 will Lead to a Reduction in Costs to Participants Does Not Support a Finding of No Cost Shift To Non-Participating Customers

El Dorado’s comments include an illustration of how a waste water treatment project with three meters might save money under Aggregation and claims that Aggregation would permit it to install a much bigger solar panel that will produce more power than would be consumed at any one of its three meters. It argues that the availability of Aggregation would change its decision about what solar panels to install, because it can receive higher revenue for the output of these panels.⁴ SEIA similarly notes that authorizing SB 594 “will open up the net energy metering program to new customers who previously found the program not to be cost effective.”⁵ These claims highlight the fact that Aggregation will reduce costs for eligible customer-generators, not for non-participants. Thus, these remarks have no bearing on the finding required here that there is no additional cost shift to non-participants. The task of the Commission before authorizing Aggregation is to establish that Aggregation, “will not result in an increase in the expected revenue obligations of customers who are not eligible customer-generators,” as required by SB 594.⁶

PG&E Supports Cost Concerns Raised by SCE and SDG&E

Both SCE and SDG&E raise valid concerns about the interconnection and billing costs due to SB 594 aggregation. We agree with their point that while we can estimate the costs to implement the proper billing structure, the participation rates are unknown. This makes it extremely difficult to set fees for participants to cover these costs and prevent cost shifts to non-participating customers. For example,

⁴ El Dorado Comments, page 1.

⁵ SEIA Comments, page 1.

⁶ Public Utilities Code Section 2827(h)(4)(D).

both RES-BCT and NEMV have experienced limited participation to date (i.e., about 25 projects participating in the programs). If SB 594 has similar participation rates, then it is extremely unlikely that implementation costs could be recovered through customer fees. Alternatively, establishing setup charges at a level where costs might be recovered would make the cost per aggregation customer potentially cost prohibitive.

PG&E agrees with SCE proposal that the Commission commit to further analyze the revenue impacts of NEM Aggregation on non-participants.⁷ PG&E appreciates that the DRA also recognizes that there is insufficient foundation for DR's findings of no cost shift.

Various Parties Point to Higher Interconnection Costs for Larger Systems

As PG&E noted in its opening comments, and as the DR notes, the record on system costs is inconclusive. However, PG&E does have some experience with NEMMT projects and wholesale projects and the evidence, while limited, does not support the claim made by various parties⁸ that costs will be lower for projects with aggregation because they will be larger non-residential projects.

PG&E Supports SDG&E's Request for Additional Time to Implement

On page 4 of its comments, SDG&E states that "Due to the complexity in implementing meter aggregation, SDG&E requests at least thirty (30) days after the Commission issues a resolution to file a Tier 2 Advice Letter revising its NEM tariffs." SDG&E cites as justification the need to plan changes to the billing system and define new internal administrative procedures. PG&E concurs and supports this request. As noted in PG&E's opening comments and above, there are significant differences with the introduction of this aggregation.

Conclusion

As noted in opening comments, PG&E believes the DR does not provide sufficient justification for the finding that there will be no additional cost shift if NEM aggregation is allowed under SB 594. In fact, there is substantial evidence – such as an increase in NEM installations overall, the likely billing implementation costs and likely increased interconnection costs – that indicate the cost-shift will increase. Therefore, PG&E respectfully requests that the Commission complete the analysis necessary either to support such a finding or to determine that there is an increased cost shift. However, if the CPUC adopts Resolution E-4610 with its current finding, PG&E requests that the DR be modified as discussed here and in PG&E's opening comments.

Handwritten signature of Brian Cherry in black ink.

Vice President – Regulatory Relations

⁷ SCE Comments, page 3.

⁸ SCE Comments, page 2; SDG&E Comments, page 3.

cc: President Michael R. Peevey
Commissioner Michel P. Florio
Commissioner Catherine J.K. Sandoval
Commissioner Mark J. Ferron
Commissioner Carla J. Peterman
Frank Lindh, General Counsel
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