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BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Develop a Successor to Existing Net Energy Metering Tariffs Pursuant to Public Utilities Code Section 2827.1, and to Address Other Issues Related to Net Energy Metering.	Rulemaking 14-07-002 (Filed July 17, 2014)

THE OFFICE OF RATEPAYER ADVOCATES' NET ENERGY METERING PUBLIC TOOL POST-WORKSHOP REPLY COMMENTS

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I. INTRODUCTION

On August 11, 2014, Energy Division (ED) conducted a public workshop (Public Tool workshop) led by staff and the Energy & Environmental Economics (E3) and Lawrence Berkeley National Laboratory (LBNL) contractors to present their proposed approach for developing a "Public Tool" that evaluates potential customer-generator tariff or contract options to aid in the development of a successor tariff or standard contract for net energy metering (NEM) in this proceeding. On September 5, 2014, the Commission issued a Ruling (Ruling) seeking post-workshop comments with specific questions on different aspects of the Public Tool and its potential use. Opening comments responding to the questions were submitted on October 1, 2014 by the Office of Ratepayer Advocates (ORA), Community Alliance with Family Farms (CAFF), California Farm Bureau Federation (Farm Bureau), Californians for Renewable Energy (CARE), California Environmental Justice Alliance (CEJA), Clean Coalition, Interstate Renewable Energy Council, Inc. (IREC), Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), Sierra Club, Southern California Edison Company (SCE), The Alliance for Solar Choice, California Solar Energy Industries Association and Solar Energy Industries Association (Solar Parties), and Vote Solar. These reply comments respond to parties' opening comments.

II. DISCUSSION

A. ED and E3 Should Document Choices In Analytical Approaches For Transparency

Throughout the Public Tool workshop discussion and opening comments, parties have recommended many refinements to the Public Tool data inputs and analytical design. ORA recommends that ED and the contractors make a rigorous effort to design the Public Tool so that it is capable of modelling all the recommended variations suggested by parties; except for recommendations related to rate designs, solar PV compensation mechanisms, or individual tariff elements that are likely to be legally problematic or impossible to implement, as discussed in ORA's opening comments.

ORA recognizes that it may not be possible for ED and the contractors to implement every one of the variations recommended by parties without making the Public Tool overly complex and difficult for all parties to understand and use. In cases where ED and the contractors are forced to choose between analytical options or elect to exclude refinements recommended by parties, ORA requests that ED and the contractors clearly identify those decisions and provide a rationale for those decisions in the Public Tool user's manual or final report.

B. The Public Tool report should be a user's guide with no range of results. (Q. 1)

Question 1 of the Ruling requested comments or concerns regarding the proposed approach of developing a public tool in conjunction with a report containing the range of results from the Public Tool. ORA agrees with the Solar Parties' objection to a report presenting a range of results from the Public Tool[1]. Like the Solar Parties, ORA recommends that the report that accompanies the release of the Public Tool should be a thorough user's guide that helps parties understand how to use the Public Tool.

IREC raises concerns regarding providing a range of model results in the Public Tool report. ORA agrees with IREC's concerns about the potential for such a report to exclude some scenarios, or to become overly complex if an attempt were made to provide comprehensive results[2]. However, ORA disagrees with IREC's proposed solution of presenting results by four general stakeholders groups[3], as ORA does not believe that this will adequately resolve the concerns shared by IREC and ORA.

CAFF and Vote Solar also express concerns regarding the potential for bias in reporting the Public Tool scenario results. CAFF recommends that parties have an opportunity to comment on the range of results before they are finalized[4], and Vote Solar

[1] Solar Parties Opening Comments, p.3.

[2] IREC Opening Comments, p.2.

[3] IREC Opening Comments, p.3.

[4] CAFF Opening Comments, p.4.

recommends that the Public Tool present the results of various parties' modeling efforts using the Public Tool[5]. As discussed in opening comments[6], ORA does not believe that there is adequate time in this proceeding for these recommended processes. Additionally, ORA believes that it could be problematic for ED and the consultants to attempt to summarize all parties' modelling results in a technical report.

ORA believe that it will be more efficient for parties to present any Public Tool modelling results that they produce, along with related policy positions, when parties have the opportunity to advocate for a NEM successor tariff in this proceeding through filed comments, workshops, testimony, and evidentiary hearings.

C. The Tool Should Use A Reasonable Range Of Adoption Rates and Include A Metric For Payback (Q. 3)

Several parties brought up issues with developing an adoption rate as a measure of sustainable growth and recommended that it not be used.[7] These include sensitivities of an adoption rate to effects outside the CPUC's control, such as macroeconomic conditions and international trade tariffs, and dependency on the value proposition of renewables which would also be estimated in the model, leading to additional uncertainty in the adoption rate.[8] IREC and SDG&E recommend that rather than developing a model for adoption rates, that a reasonable range of levels of adoption could be used to assess other evaluation measures in the model.[9] ORA supports this approach as it would account for different levels of adoption based on changes in government policy, economic conditions, etc. that are outside the CPUC's control and allow the consideration of different scenarios.

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[5] Vote Solar Opening Comments p.1-2.

[6] ORA Opening Comments, p.1.

[7] PG&E Opening Comments, p.5; SDG&E Opening Comments, p.3; IREC Opening Comments, p.8.

[8] PG&E Opening Comments, p.5-6; SDG&E Opening Comments, p.3.

[9] IREC Opening Comments, p.14; SDG&E Opening Comments, p.7.

PG&E recommends that payback shouldn't be included in the Tool as a measure of the value of the system and a drive for customer adoption, ORA disagrees.[10] While PG&E brings up the relevant issue that payback period does not necessarily account for the growing third-party owner business model, not all customers are participating in NEM through third-party owners. Payback should be included as an evaluation metric in the Tool because it continues to represent the value proposition customers would consider when determining whether or not to adopt renewable DG themselves.

D. ORA Supports the Addition of All Avoided Cost Components and Updates Proposed by Parties (Q.4-6)

Questions 4 through 6 all pose related questions concerning the avoided cost components of the Public Tool. ORA supports the addition of all avoided cost components and updates proposed by parties wherever it is technically possible to include in the Public Tool. With the exception of components and updates that are unequivocally legally or technically unfeasible, ORA believes the integrity of the Successor to Existing Net Energy Metering Tariffs proceeding is best preserved by the inclusion of all parties' proposals in the analytical tools used to evaluate the successor tariff options. For this reason, ORA opposes SCE's proposal to exclude intangible costs that are not directly tied to utility revenue requirements, such as societal benefits and the global cost of carbon, from the Public Tool[11].

E. Analysis Period Of The Tool Should Allow The Commission To Consider The Long-Term Impacts Of A Successor Tariff (Q.12)

ORA disagrees with the Solar Parties recommendation that the analysis period of the Tool be limited to 2016-2020.[12] The objective of this proceeding is for the Commission to adopt a successor to the existing NEM tariffs to ensure that customer-sited renewable generation continues to grow sustainability and that the total benefits of

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[10] PG&E Opening Comments, p.7.

[11] SCE Opening Comments, p. 5.

[12] Solar Parties Opening Comments, p.26.

the successor tariff or contract are approximately equal to the total costs.[13] This required consideration of the long-term impacts of recommendations for a successor tariff or contract, rather than a limited view of a five year period. ORA supports the proposed term of analysis that would track new renewable DG installations out to 2025 and evaluate their useful lifecycle to 2050 as it would allow the Commission to consider the long-term impacts of successor tariff or contract.

F. Smart Inverter Technologies Paired with DG Applications Should be Examined

ORA urges ED to disregard PG&E's suggestion that it would be premature to include benefits from smart inverters in the Public Tool at this time[14]. Ignoring the potential benefits of smart inverters in the examination of successor tariff options would create a significant analytical shortcoming within the Public Tool, and would represent a departure from the policy goals the Commission is currently striving to achieve within the Rulemaking to improve distribution level interconnection rules and regulations[15]. While the long-term benefits of smart inverter deployment may not be thoroughly understood at this time, the benefits of smart inverters are currently the subject of fairly widespread research inquiry[16], not a matter of speculation.

G. Customer Generators Should Be Modeled As A Separate Class (Q. 21)

Seven parties responded to Question 21, which asks "Should participating customer-generators be modeled as a separate customer class for cost allocation and rate design purposes?" Six parties objected, saying that it is complex and time consuming

[13] R.14-07-002 OIR, p.4.

[14] PG&E Opening Comments, p.25.

[15] R. 11-09-011.

[16] For example, the Smart Inverter Working Group (SIWG) was formed by the California Public Utilities Commission and California Energy Commission to develop recommendations for changes to Rule 21, which regulates grid-interconnected distributed generation resources.

(Vote Solar[17]; Solar Parties[18]; and SDG&E[19]), possibly not legal (Vote Solar; Solar Parties), and could dampen the growth of the solar industry (IREC[20]). Only PG&E said that it does not object to the proposal, but that it does not think it is necessary.[21]

The only party which explains why it would be complex is SDG&E. It states that different NEM customer classes would have to be established for residential, small commercial, medium and large commercial and industrial, agricultural and street lighting classes. In addition, there would be the likely need to differentiate customer generators by technology. It indicates that such a level of segmentation could cause potential issues with having a sufficient sample size to develop billing determinants.

ORA believes that SDG&E's concerns are exaggerated. Data very similar to the billing determinants required to calculate rates for a subclass would have to be established for each NEM subgroup to calculate the cost of service and cost shifting associated with each of these subgroups.[22] In fact, the same marginal costs that would be used to calculate cost of service would be used in the cost allocation and rate design process. Thus, whatever sample size is required to set the required inputs for a cost of service analysis also would be required to design rates separately for each group.

A similar problem was encountered by SDG&E in R.12-06-013 when a scoping ruling requested that the utilities calculate bill impacts for very specific customer segments. SDG&E responded that its sample size was inadequate for this level of segmentation and that it could not incorporate this detail into its bill calculator model,

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[17] Vote Solar Opening Comments, p. 17.

[18] Solar Parties Opening Comments, p. 31.

[19] SDG&E Opening Comments, p. 16.

[20] IREC Opening Comments, p. 5.

[21] PG&E Opening Comments, p. 30.

[22] It is true that cost allocation and rate design use different inputs. Cost allocation employs demand measures that reflect coincident loads at different points on generation and distribution systems, whereas rate design relies on kW demands and kWh usage at the meter. But the same raw source data goes into producing all of these measures. ORA presumes that the data that would be used to calculate cost of service is essentially the same data as is used in cost allocation.

which is the equivalent of the public tool in this proceeding. Instead, SDG&E required parties to ask for such analysis by data request. Sample sizes did not appear to be impediments for PG&E and SCE, and they successfully modified their bill calculator models to perform a more segmented analysis.[23] ORA has given SDG&E the feedback in R.12-06-013 that it should increase its sample size, and the same feedback applies here.

While ORA appreciates that PG&E does not object to the proposal, it does not understand why PG&E does not find it necessary. It goes on, in its comments, to discuss how it is essential for the public tool to have the capability to calculate cost of service for distributed generation customers. Again, it seems that very similar information is required to do that as is required to set up separate rate classes in the public tool.

As indicated, the other parties did not explain the nature of the added complexity. ORA does understand that a more complex model takes longer to run on a desktop or laptop computer, and this was a problem with some of the bill calculator models in R.12-06-013. Runtime issues could be addressed by having separate modules for the three utilities and the option to not model separate rate classes if the user so desires.

As for a separate rate class potentially not being legal, none of the parties explained how it would be illegal. Thus, it is difficult for ORA to comment. They might have in mind the restrictions in PU Code Section 2827(g), which requires that each NEM contract or tariff have an identical rate structure as that applicable to non-NEM customers. It is ORA's understanding, however, that this part of the code only applies to what have been called "NEM 1.0" customers and not to "NEM 2.0" customers. If parties do not agree, then a round of legal briefs on this issue should precede the completion of the public tool.

Finally, IREC is concerned that forcing NEM customers into a separate rate class could dampen the growth of the solar industry. Whether NEM customers would benefit or be harmed by being in a separate rate class is unclear, and part of the objective of this

[23] PG&E, SCE, and SDG&E had sample sizes of 7782, 3638, and 363 customers respectively.

proceeding should be to find out. Placing NEM customers into a separate rate class might result in them receiving a higher allocation of distribution costs owing having to lower load factors, but that could be more than offset by the fact that their load during generation peak is largely non-coincident with the rest of system. In fact, it is such diversity benefits that lead to NEM customers on SCE's Schedule R receiving discounts on their demand charges. In any case, if NEM customers are hurt by being on a separate rate class, and the Commission decides that further subsidies are required to maintain sustainable growth in the solar industry, such subsidies can be provided either separately or as part of the rate design.

H. Netting Of Exports And Imports Should Be Done At The Hourly Level (Q.22c)

PG&E is correct that no netting is required if different rates are applied to the imported and exported energy as long as the Smart Meters are capable of tracking the two separately.[24] However, based on discussions with the other two utilities, it was ORA's understanding that separate meters are required to measure and record two streams of energy separately. What the Smart Meters can track in different channels are the net exports and the net imports. If the latter constraint does exist in the other utilities' Smart Meters, then ORA has stated in its opening comments that the netting should take place at the hourly level. While the non-residential customer smart meters would allow nettings every 15 minutes, ORA does not believe that this added level of complexity in the bill calculations and bill presentments would justify the increased accuracy.

I. It Is Premature To Consider A Process Of Review For The Successor Tariff At This Time (Q.29)

PG&E recommends that the Commission review the long-term analysis and the effectiveness of the successor tariff on a regular basis.[25] It is premature to consider and establish a process of review for the successor tariff at this time. The focus should be on

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[24] PG&E Opening Comments, p.32.

[25] PG&E Opening Comments, p.42-43.

issues impacting the development of the Public Tool. Parties should have an opportunity to comment on any process of review of the successor tariff after recommendations for a successor tariff are provided for the Commission's consideration.

III. CONCLUSION

ORA supports the development of the Public Tool and urges the Commission to provide a transparent process for its development.

Respectfully submitted,

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