President Michael Picker California Public Utilities Commission 505 Van Ness Ave San Francisco, CA 94102

Jean Woo Custom Power Solar, Inc 1442A Walnut Street #368 Berkeley, CA 94709

June 16,2017

RE: Informal Comments in Response to Request of President Michael Picker on Customer and Retail Choice En Banc and White Paper dated May 9, 2017

Dear President Picker,

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We were pleased to be able to participate as part of the audience for the May 19th En Banc on Consumer and Retail Choice, The Role of the Utility, and the Evolving Regulatory Environment. We welcome the opportunity to send in comments in response to the En Banc. And accompanying White Paper.

We would like to comment in response to Question 4. Page 13 of the Staff White Paper. The first question posed is: "How does the State of California ensure that the many different players work together to ensure that the State's electric supply is not only clean but is also reliable, efficient and resilient?" ... and secondly, "How should the state's electric power become more resilient (e.g., capable of fending off attacks from physical and cyber threats, as well as speedy recovery from disasters)?"

One of the topics that has not been looked at in terms of the solar customer experience under NEM and CCA's, is the complexity of the billing system that is being utilized at this time. Of key importance is that for distributed energy – i.e. solar plus potentially battery energy storage-optimizing the customer experience around solar and renewables is a priority. We need to rapidly reduce the confusion level for the business and homeowner to achieve the legislative mandate for sustainably increasing the implementation of solar and renewable energy resources in California.

For the installer, customers need to understand the differences between the utility versus relevant CCA rates to make an informed decision. Due to differences in the approach to NEM between the annual utility "true-up" for net energy metering, and the monthly "bill settlement" approach employed by the community choice aggregators with regard to the generation aspect of the bill, modeling this situation is extremely difficult. For installer and developer companies to explain the benefits of installing solar, or solar plus storage, increased reliable access to the relevant data is needed. The reason for this lies in part in that the data on the varying rate structures and NEM approaches is not easily available, varies by CCA, and that the commercially available websites and apps do not appear to be incorporating this rate data into their calculations. In addition, the lack of availability of data from the installed systems (e.g., from the "green button") for developers and installers also reduces the ability to model different rate choices on NEM between rates.

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The customer needs a single site that provides an explanation of peak versus non-peak hours and rates, and an explanation of minimum bill, non-bypassable and other required charges in simple language that the customer can understand. Access to this information in multiple languages is essential.

Possible ways to increase access for developers and installers to the rate and interval data could include a check-box function for third party authorization on the utility website. Another option would be that CCA's have automatic download of every 15 minute interval data from their customers based on the premise that the CCA is providing power and requires that data to provide the same information to their NEM customer as any other NEM customer. An even better approach would include building a more comprehensive billing and tracking database for all customers of the CCA and the relevant utility.

Another aspect of the varied CCA approaches is the impact of the monthly "settlement payment" system. This is an area of confusion for the project owner and possibly can determine the yes/no response of the potential solar customer. Utilizing an annual true-up by both the CCA's and the utilities would alleviate the stress of the additional bills in the winter period, and reduce customer confusion.

An independent non-biased non-utility source of contact for both the CCAs and the utilities, which can clearly explain the differences between the approaches of the utility and the relevant CCA, would be a great assistance to the consumer. This should be online and include telephone access via an 800 number. Not everyone has easy access or uses the internet for information gathering.

The online resource should include a database of the NEM approaches and rates (monthly versus annual, rollover versus no rollover of credits, treatment of credits, compensation for energy to the grid , T&D and minimum bill requirements, an explanation of non-bypassable charges, TOU versus EV rates, etc). Development and IT support could possibly come from

public interest charges, NEM, SGIP, EV implementation and other administrative funds. The rationale for this is that this information is in the public interest.

Rate differentials implemented for EV charger owners, such as the 2-hour window that SDG&E recently announced for EV owners, can also be on this site to encourage EV and plug-in owners to utilize their solar power at the best possible times with relation to their rates, and possibly with relation to utility needs for grid power control/demand response.

En Banc Question II. B. As retail choice grows, whether through the growth in CCA programs, customer adoption of DERs, or reinstatement of full direct access, what do you see as the role for the regulated utility and where do you see your company/organization competing and cooperating with the utility?

Our company works to increase renewable energy systems on rooftops and as part of the distributed generation portion of the grid. We cooperate with both the regulated utilities, and with the CCA's in providing this service. We work to increase access via available financing mechanisms and through public information gatherings. We continue to emphasize the long-term economic benefits of renewable power plus battery energy storage and increased individual and business EV use.

We plan to continue to work cooperatively with both IOU's and POU's and with CCA's to continue to develop renewable energy capability in the state. We would like to emphasize an aspect the continuing development of renewable energy which has not received as much attention as it deserves.

With regard to reliability and resilience, increasing our ability to develop and build community-based solar installations that can provide for resilience in the face of natural or man-made disasters would be a benefit for the entire state. These installations should be placed close enough to provide grid support when the grid is not available, for potentially prolonged periods of time. We live in an earthquake prone state, with areas having ground shifting even from man-made activities, which can negatively impact both rural and densely populated parts of the state. Making these kinds of installations a priority, whether school-based, or based on government facilities (fire stations, police stations, shelters) or other sites, such as hospitals and clinic, could continue to provide needed services for the co-located facility, and power replacement can be designed to include the local jurisdiction/census tract/ or other reasonable area. This kind of emergency planning can alleviate some of the delay and distress that will inevitably accompany a large-scale disaster.

This has not been publicly voiced as a concern of either the utilities or the CCA's and should be a matter of cooperation, not competition, incorporated in ongoing grid planning and distributed resource planning of the PUC. Funding options can include present funding sources, or new ones should they be identified or created in the future.

In summary, we recommend:

- (1) That the CPUC, and CEC, work with the IOUs, CCAs, POUs and others to develop a plan to improve billing so that the customer is not frustrated and confused by the "two bills" system now in place.
- (2) Re-evaluate the monthly settlement policy at CCA's to synchronize to annual true-up and settlement policies to reduce customer confusion.
- (3) Increase access to customer data for both customers and developer/installers, for the reasons stated above.
- (4) Provide an free, unbiased, independent, comprehensive database online for rate and policy information for the CCAs with comparison to the POU and IOU policies with regard to NEM, residential and commercial rates, and include EV charging rates and policies.
- (5) Develop an free independent reliable service (online and by telephone) to explain the details of NEM, TOU periods and non-bypassable charges, different rates, reliable advice, with well-trained customer service personnel capable of answering customer inquiries in multiple languages.
- (6) Develop an emphasis in terms of resource planning that encourages implementation of micro-grid and community-based solar plus storage systems, with charging stations for EV's, responsive to projected and potentially long-term needs (months not days) in case of major natural or man-made disasters.

We appreciate this opportunity to send these comments to the California Public Utilities Commission (CPUC) and the California Energy Commission (CEC) as concerns arising from the continuing progression toward increasing customer choice in California.

Respectfully submitted,

Jean Woo

Founder, CFO

Custom Power Solar, Inc

1442A Walnut Street #368

Berkeley, CA 94709

510-849-7633

jean@custompowersolar.com

Dated June 16, 2016 at Berkeley, California