

DOCKETED

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*Comment Received From: Jane Williams
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**on Behind the Meter Renewable Backup Power Technologies -
Request for Information**

Additional submitted attachment is included below.

Via Email (docket@energy.ca.gov)

October 25, 2022

Re: Docket No. 19-ERDD-01, "Behind-the-Meter Renewable Backup Power Technologies – Request for Information"

Gentlepersons:

This letter is in response to the "Behind-the-Meter Zero-Emission Backup Technologies" Request for Information (RFI) from your Commission, which requests input on how to scale *zero emission* power backup/microgrid systems throughout California. These comments are directed to general question No. 1 from the RFI. We greatly appreciate this effort being undertaken by the CEC, and we believe the idea of developing *micro-grid technology* that can be replicated time and again in a cost-effective manner will allow for the deployment of many more clean energy-anchored microgrids over time. However, despite the noble intentions of this effort, we will never see the mass scaling of clean energy-anchored microgrid technology until certain core issues, as discussed below, have been addressed.

In short, in order for zero emission microgrids to be adopted at scale, (1) flexibility in system siting must be granted to allow microgrid adopters to operate **in front of the meter** (on parks, vacant lots, etc.), yet be paid at a retail rate (or on a significantly above wholesale *feed-in-tariff* rate); and (2) significant grant assistance must be provided to help pay for batteries or other storage systems (including green hydrogen-fed fuel cell

technology) rather than subsidizing the utilities when they use batteries for their own pricing arbitrage purposes.

The first issue is very simple. As the Commission is well aware, solar PV, the necessary power generating anchor for in-city zero emission microgrid facilities, is not economical to build on a *distributed* (in city, and therefore by definition not at commercial scale) basis if the system developer is limited to wholesale (typically 2-3 cents per kilowatt hour) pricing. That is why the only profitable in-city solar PV installations operating at present are *behind-the-meter*. As the Commission is well aware, behind-the-meter solar PV operations are economical because they serve to reduce the retail price a customer otherwise pays the utility. If in-city solar breaks even at a 6-9 cents per kilowatt hour rate, then solar is very cost effective if it is offsetting a (as an example) 23 cent per kilowatt hour retail energy bill. And, with significant savings, much more money can be spent on the storage side of the process, discussed below.

The second issue is also straightforward. If more grant and other assistance is directed toward subsidizing the costs of batteries and other energy storage for local microgrid operators (like cities and nonprofits), many more truly resilient solar-anchored microgrid projects will get built. While various well-intentioned programs have been put in place at the state and federal level to encourage the use of batteries for energy storage purposes, we find that much of that storage-related monetary assistance is going to utilities, and much of that money is being spent for pricing arbitrage purposes, rather than on microgrids. We would like to see much of these battery incentives saved for those implementing microgrid/resiliency projects. Thank you for the opportunity to comment on this important issue.

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