

## DOCKETED

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**From:** Steve Schmidt [mailto:steve@hea.com]  
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**To:** Energy - Docket Optical System; Ownby, Adrian@Energy  
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The idea of "more residential solar" keeps coming up as a good idea... and it used to be, but it's not any more. In the age of expanding CCAs, I think more residential solar is a bad idea. Here's why:

1) Many new CCA's across the state (including SVCE and PCE here in Silicon Valley) buy electricity under contract from large-scale wind, solar and hydro resources for about 5 cents/kWh. It hurts them financially to buy electricity from NEM customers at about 15 cents/kWh. The more electricity they buy under NEM tariffs, the less money they have to use for local fuel switching & other beneficial electrification ("BE") programs, or further rate reductions. Here's a quantitative example: If PCE buys 95% of its energy at 5 cents/kWh and 5% at 15 cents/kWh, its blended cost is 5.50 cents/kWh. If the mix changes to 94%/6% the blended cost is 5.60 cents/kWh. A tenth of a penny per kWh may not sound like much, but it is.

2) Rooftop solar electricity used to be substantially greener than grid power. The difference has disappeared in [SVCE](#) territory (now providing 100% carbon free electricity) and soon will for PCE and other CCAs across the state.

3) The primary benefit of local generation (like rooftop solar) is to slightly delay future investments in upgraded transmission and distribution infrastructure. Delayed infrastructure investment helps PG&E exclusively because they're responsible for T&D (transmission and distribution). It doesn't help the CCAs themselves, though it does produce a very small financial benefit for their customers because PG&E's rates for T&D will grow just a little bit more slowly.

4) When CCAs consider running local solar incentive programs the problem just gets worse. Not only are they incentivizing something that costs them extra money (see 1, 2 and 3), they are using precious staff time and spending money on marketing solar that they could have spent on marketing BE.

5) Solar PV is much more cost effective when implemented at utility scale, not at the residential scale. How many homeowners really need yet another system to maintain within their home?

6) Rooftop solar PV is unmetered and uncontrolled by CAISO. As such, it is not useful in balancing the grid.

7) The proliferation of EVs and the eventual deployment of vehicle to grid ("V2G") technologies will help solve the renewable storage problem. Don't mandate systems that will make the final outcome less cost effective than it needs to be.

8) We want new homes to be all-electric. Spending extra dollars on a PV system means less money available for heat pump water heaters and space conditioners.

As a state with increasingly clean grid electricity, we should be driving toward "**Zero Net Emissions**" not "Zero Net Energy". Please don't require new homes to add solar PV -- the utilities and CCAs can clean up the grid in a much more cost-effective manner.

Thanks for the opportunity to voice an opinion on this important issue.

-Steve Schmidt

Founder, [Home Energy Analytics Inc.](#)

Alt. Director, [Silicon Valley Clean Energy](#)

Director, [Carbon Free Silicon Valley](#)