

Berry, Taylor

From: Graham Crispin <gcrispin59@gmail.com>
Sent: Tuesday, May 10, 2022 1:10 PM
To: Statements
Subject: Docket E-100, Sub 180CS - Commercial Vs Residential Solar

Thank you for your consideration of the issues regarding deployment of Alternative Energy and your oversight of the public good.

Nowhere have I heard an argument for optimizing the deployment of PhotoVoltaic (PV) solar between, Utility, Alternate Providers, Commercial and Residential locations.

The costs fall into a number of categories:

- 1) PV panels
- 2) Installation
- 3) Acquisition costs of the installation site
- 4) Distribution (and Billing) costs
- 5) Grid Leveling Control Systems
- 6) New Transmission lines

For Residential, only **installation has a significantly higher cost** compared to the other providers. Additionally, when combined with demand management and some residential batteries, it significantly reduces the risk of weather related power disruption. That risk mitigation is seen as a major benefit by some. Financing is a social and equity issue due to inability to capture the financial benefits when Utility Net Metering is mandated by a monopoly.

For Commercial, power is generated where it is used and has low installation costs and no acquisition costs for the installation site. Financing is less of an issue as there is less discordance of timing of generation and demand. Additionally, excess power can be transferred to electric vehicle fleets and sold to private vehicle users.

Alternative Suppliers use existing property to provide dual use of the property for generation and its existing use. Installation costs are very low, no acquisition costs for the installation site, however, there is **Distribution, Grid Leveling and new transmission line costs**.

Utilities have pricing power and the lowest cost for PV panels and Installation, but **high acquisition costs of the installation site, substantial Distribution Grid Leveling Control Systems and new Transmission lines**.

I trust that your policies aim to maximize the public benefit of fast transition to carbon free energy, where appropriate, and prioritize incentives, while acknowledging that intransigence in the Commercial sector needs to be overcome to have the most efficient deployment of limited resources on existing Commercial Properties and Structures adjacent to existing demand and future demand from electric vehicles.

Micro and community grids centered on commercial property are the most efficient use of capital, installation labor, and limited PV panels for fast Return on Investment. Preferential zoning of locations near demand, and incentivizing commercial owners to act is key to achieving optimized ROI. I have a few proven concepts that may be useful.

Sincerely,
Graham Crispin
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May 10 2022

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Kind Regards
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