

**Comments submitted by REPOWER by Solar Universe to the Federal Trade  
Commission Workshop “Something New Under the Sun: Competition and Consumer  
Protection Issues in Solar Power,” June 21, 2016**

REPOWER by Solar Universe (Livermore, California) is the nation’s 4<sup>th</sup> largest provider of solar distributed generation (“DG”) to customers in 15 states plus Puerto Rico. In all of these states utilities are treated as natural monopolies, and investor-owned utilities are regulated as such by state public utility commissions (PUCs). In many of these states, utility-driven rate changes have jeopardized REPOWER’s ability to sell solar DG. Real or threatened elimination of net metering rates, and/or establishment of new limitations and fees on DG customers have significantly reduced or eliminated the value proposition for solar, and have at least created enough of an environment of uncertainty that the market for solar is severely curtailed. Utilities’ monopoly status ensures that there are no market-based solutions to these situations; DG companies are essentially at the mercy of utilities. For this reason, we have focused our comments on the importance of long-term stability in solar electric rates and incentives.

For more than a decade, the success of solar as a business has required relatively stable rates and incentives. Unstable incentive structures (expiring incentives, inadequately funded incentive mechanisms, etc.) have been the one of the greatest limiting factors to DG industry growth. Consumers who don’t have confidence that solar savings estimates are accurate won’t commit to contracts, limiting market growth. Similarly, if DG companies are unsure about how long a particular incentive or rate structure will last, they won’t invest to expand their businesses (hiring, capital purchases, etc.).

Before the California Solar Initiative was created (pre-2005), funds for solar rebate funds were authorized only periodically, and they frequently ran out with customers still on waiting lists. Significant delays or risks associated with rebates often resulted in cancelled projects, since at that time rebates were essential for most solar installations to pencil out. The result was an erratically growing market, and failure of most solar companies to scale because of the risks of expanding their businesses in an uncertain market. A survey of Northern California solar companies in 2004 identified inconsistent government support (in the form of inconsistent solar incentive programs and electric rate instability) as a threat to their businesses second only to module supply shortages. [1]

Although rebates are no longer part of the picture in many states, net metering remains a critical component of economic viability for many if not most solar projects. Since the pre-2010 module shortages have been addressed by the market, inconsistent government support for solar/rate uncertainty now represents the greatest threat to DG expansion. Since electric rates are as critical to calculating a solar project’s value as tax credits or rebates, utility rate structures have the same impact on solar viability as government incentive programs. Thus, the attack by many utilities on net metering structures today will have the same chilling effect on DG that inconsistent rebate programs did over a decade ago.

As examples, these recent utility actions to eliminate net metering has had the expected negative effects in the affected DG markets:

1. Hawaii: Solar jobs have declined 35% since decision to end net metering, and solar installation permits have dropped 13% in January through April of this year. [2]
2. Imperial Irrigation District (CA): Value of many residential solar systems disappeared in February after net metering was suddenly eliminated. [3]
3. Nevada: Disarray (no pun intended) in the state’s solar market following the PUC’s anti-net metering decision has resulted in major solar companies pulling out of the state, litigation by system owners, and so forth. There has been a 93% decrease in solar permit applications since the decision. [4]

Since solar is a long-term investment, relatively short-term changes in electric rates &/or rate uncertainty make investing in solar a poor decision for most homeowners. Consumer

protections are needed to prevent solar customers from losing a substantial portion of their solar investment's value virtually overnight due to a rate change.

In addition, uncertainty or significant changes in rate structure dramatically affect the viability of solar businesses in the market. Utility tactics that target solar companies this way are unfair business practices. Further, rate structures that undermine the value propositions of DG providers are a form of predatory pricing.

Conclusion: In order to avoid financial harm to consumers and use of anti-competitive tactics against DG businesses, there should be significantly higher standards of proof required when utilities seek changes in net metering laws. Grandfathering requirements, limits on the speed of rate changes & restrictions on anticompetitive practices by utilities are also needed.

The following are additional comments from REPOWER on related FTC questions:

- I. Solar DG should be valued holistically in regulatory considerations.
  - A. Studies show the net benefits DG and net metering bring to the grid and to the environment overall<sup>[5],[6], [7]</sup> versus the costs utilities claim. At a minimum, utilities should not be allowed to use and PUCs should not rely on the most conservative estimates of DG benefits.
  - B. In addition to the many environmental benefits, economic benefits to the grid and to ratepayers overall include:
    1. DG reduces the burden on transmission & distribution assets
    2. DG avoids the need to purchase/invest in peak generation capacity
    3. DG improves grid resiliency in the event of outages
    4. DG provides about 6% more energy to the customer per watt generated because it avoids transmission & distribution loss<sup>[8]</sup>
    5. As a result, the utilities' cross-subsidization argument actually runs the other way: DG ratepayers are in fact subsidizing non-DG users.
- II. Utilities and regulators should be required to include environmental benefits in any analysis of DG costs and benefits to ratepayers, and to consider economic analysis from non-utility sources.
- III. Utility rate presentation and structure should be considered a consumer protection issue.
  - A. Electric rate transparency is low for many consumers: many don't know what rate plan they're on or how the rates work (based in REPOWER sales experience).
  - B. Rate interpretation becomes even more confusing with solar (with end-of-year true-ups, DG surcharges, etc.), ultimately driving some solar customers away.
  - C. Utilities should be required to provide rate information in easy to understand language so consumers can make more informed decisions.
- IV. Limitations on changes to net metering rules should apply to publicly owned utilities as well as investor-owned utilities. Publicly owned utilities serve about 25% of US electricity consumers and are not regulated by state PUCs.<sup>[9]</sup> See Imperial Irrigation District situation, above.
- V. It is time to re-evaluate the assumptions about the natural monopoly stature of electric utilities. Changes in the economics of energy generation and distribution, the rise of DG of multiple types, and the introduction of new technologies may significantly weaken the case that utilities are natural monopolies deserving special treatment that shelters them from competition in their markets.

Sources consulted

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[2] *Utility Dive*, May 13 2016, <http://www.utilitydive.com/news/hawaii-solar-jobs-fall-35-after-regulators-end-retail-net-metering/419151/>

[3] *Desert Sun*, May 27 2016, <http://www.desertsun.com/story/tech/science/energy/2016/05/27/no-relief-east-valley-assembly-kills-solar-bill/85001104/>

[4] *VegasInc.com*, Feb. 18 2016 <http://vegasinc.com/business/2016/feb/18/drop-off-in-nevada-rooftop-solar-applications-send/>

[5] Brookings Institute paper, May 23 2016, <http://www.brookings.edu/research/papers/2016/05/23-rooftop-solar-net-metering-muro-saha>

[6] Solar City-NRDC study, May 2016, [http://www.solarcity.com/sites/default/files/SolarCity-Distributed Energy Resources in Nevada.pdf](http://www.solarcity.com/sites/default/files/SolarCity-Distributed%20Energy%20Resources%20in%20Nevada.pdf)

[7] *Utility Dive*, May 24 2016, <http://www.utilitydive.com/news/utilities-greens-still-miles-apart-on-solar-valuation-new-report-shows/418809/>

[8] *Inside Energy*, November 2015, <http://insideenergy.org/2015/11/06/lost-in-transmission-how-much-electricity-disappears-between-a-power-plant-and-your-plug/>

[9] Regulatory Assistance Project, *Electricity Regulation in the US: A Guide*, 2011, p.9. [http://www.raponline.org/docs/RAP\\_Lazar\\_ElectricityRegulationInTheUS\\_Guide\\_2011\\_03.pdf](http://www.raponline.org/docs/RAP_Lazar_ElectricityRegulationInTheUS_Guide_2011_03.pdf)