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**VIA ELECTRONIC FILING**

Federal Trade Commission  
Office of the Secretary  
400 7<sup>th</sup> Street S.W., 5<sup>th</sup> Floor  
Suite 5610 (Annex B)  
Washington, DC 20024

Re: Solar Electricity Project No. P161200

Dear Sir/Madam:

The Institute for 21st Century Energy (the “Energy Institute”), an affiliate of the U.S. Chamber of Commerce, is pleased to submit written comments in advance of the Federal Trade Commission (“FTC”) workshop entitled, “Something New Under the Sun: Competition and Consumer Protection Issues in Solar Power.” Pursuant to the FTC’s notice establishing the June 21, 2016, workshop to examine emerging consumer protection issues in the solar sector, the Energy Institute is submitting these comments by the June 7 deadline established for their consideration at that workshop. The U.S. Chamber of Commerce is the world’s largest business federation representing the interests of more than three million businesses and organizations of every size, sector and region, and dedicated to promoting, protecting, and defending America’s free enterprise system.

While solar power, and particularly solar distributed generation (“DG”), remained a nascent industry just a few years ago, advancements in solar panel technology, design, and manufacturing, along with a decrease in the cost of key component parts, have facilitated a decline in the overall installed costs of this electric generation technology. With such reduced costs has come a dramatic increase in the adoption rate of this technology around the country.

According to the Solar Energy Industries Association (“SEIA”), while it took approximately 62 years (from 1954 to 2016) for U.S. solar installations to reach one million, this amount is set to double within 2 years by 2018, and is set to grow by yet another one million solar installations by 2019. Also according to SEIA, of the one million installation milestone reached in the first half of this year, approximately 942,000 of those are residential in nature. Thus, nearly 9.5 out of every 10 solar installations are occurring on private homes and with

ordinary consumers that are unlikely to have the expertise in electricity ratemaking and wholesale electricity rate structures that would equip them to make a fully-informed decision on whether solar electricity is a sensible investment for their home or business.

### **An Opportunity to Protect Solar Customers**

As is evidenced by a large number of the questions posed by the FTC's notice of its solar power workshop, the rapid growth of the residential solar sector, along with the comparative inexperience of residential consumers with the economics of generating their own electricity, certainly warrants a close look by the FTC. Given that the primary mission of the FTC is to protect America's consumers, the FTC's inquiry into the residential solar power sector is overdue.

A study by Navigant Consulting of rooftop solar installations, which was submitted as testimony in an electric rate case in Arizona made the following findings:

- Solar distributed generation ("DG") firms typically operate in areas/states where they can maximize their return by undercutting utility rates;
- Solar DG firms track the applicable utility rates and raise or lower their prices accordingly, as evidenced by higher observed lease and power purchase agreement prices in jurisdictions with higher utility rates;
- The project returns for solar DG providers and their investors vary by utility service territory, with higher project returns calculated in service territories having higher utility rates; and
- Despite continuing declines in solar DG system costs and favorable policy developments, such as the reintroduction of bonus depreciation and an extension by Congress of the solar investment tax credit ("ITC"), the lease rates for solar DG installations have recently increased in certain locations.

In addition to highlighting a disconnect between the declining costs of solar DG systems and the rates being charged to consumers for these systems, this and other studies certainly underscore the need for some level of oversight – either at the state and/or federal level – of the quickly-growing solar DG industry.

### **The Need to Protect All Electricity Consumers**

While the FTC could be inclined to focus on the many consumer protection issues associated with those who choose to contract with solar DG providers to install solar panels on their homes and/or businesses, it is equally if not more important for the FTC to examine the detrimental impacts that the subsidization of solar DG technologies can have on customers who either choose not to install, or do not have the financial wherewithal or physical capability of installing, solar DG systems on their homes or businesses.

Federal programs, such as the solar ITC, already serve to shift tax obligations away from those who have the ability to take advantage of solar DG installations on their homes or

businesses, but state-level “net-metering” policies can serve to impose an even greater and more direct cost-shift from solar DG customers to other electric utility ratepayers. The FTC’s core mission to protect ALL of America’s consumers should drive the agency to pay particular attention to the net metering issue.

Net metering enables electric customers with solar DG systems to offset, usually via credits, their personal monthly electric utility bills to account for the occasions when a customer’s solar DG installation is producing more power than is then needed to satisfy a home’s or business’s electricity demand. This can only occur when the solar DG installation is producing energy, which typically only occurs when the sun is shining.

When the sun is not shining, and during nighttime hours, solar DG customers subject to net metering rate structures remain dependent on each aspect of the local utility’s electricity infrastructure (generation, transmission, and distribution) in order to satisfy their energy needs. In addition, during those hours of the day when a solar DG system is generating more energy than needed to satisfy that customer’s electric demand, the ability of that customer to “sell back” its excess energy for bill credits remains dependent upon a local utility’s distribution (and sometimes transmission) infrastructure to execute that sale. Thus, only in the rare instance where a solar DG system’s electricity production precisely matches that customer’s electricity demand is that customer not instantaneously benefitting from at least some portion of the local utility’s infrastructure investments.

However, many state net metering policies, especially those which were developed back when solar DG resembled more of a cottage industry, remain designed to incentivize solar DG installations by providing a full rolled-in retail rate credit for excess electricity produced by customers with net-metered solar DG systems. The crediting of the full retail rate as part of net metering policies results in a dramatic and unfair cost shift.

### **The Inequity of a Full Retail Credit**

A simple example serves to expose the harm that falls upon other electric consumers when a full retail rate credit is administered as part of a net metering regime. For the sake of simplicity, imagine a solar DG customer whose solar panels produce a significant amount of electricity during the day when such customer is out of his home and at work. In this instance, the vast majority of the electricity is pushed onto the utility’s electric grid and the customer receives a full retail credit for this energy. Next hypothesize that when this customer returns home at night, he uses approximately the same amount of electricity from the electric grid to perform household tasks and power his electronics, essentially netting-out his solar DG system’s daytime output with his nighttime electricity use.

At the end of the month, assuming that the customer’s solar DG system provided enough monthly electricity during the day to offset the customer’s monthly nighttime energy use, this customer would essentially be billed only a minimal monthly electric grid connection charge (likely under \$10), while not being assessed any actual “demand” charge for electric use, even though the customer was using the electric utility’s distribution infrastructure at all times while

similarly also being dependent upon the utility's electric generation and transmission infrastructure for all nighttime energy needs. The fixed costs associated with these infrastructure investments do not vary with the widespread adoption of solar DG systems, thereby forcing the utility to recover these costs from a smaller pool of non-solar DG customers. These other customers are then subject to higher rates as a result of some customers' decisions to install solar DG systems.

Moreover, this example does not consider the additional cost-shift that occurs as a result of the electric grid now being more difficult to manage because the electric power being supplied into and withdrawn from the distribution system becomes much less predictable – and less controllable – due to the increasing penetration of solar DG installations.

### **A “Hold Harmless” Policy Should Prevail**

The Energy Institute supports efforts to provide the benefits of renewable energy to American homes, businesses, and communities at the lowest possible cost. The Energy Institute also supports policies whereby private solar customers are able to sell back their excess electricity at a competitive rate. Competitive and fair rates for excess solar DG electricity will encourage and support the sustainable growth of renewable energy. But, of paramount importance is the goal that non-solar DG customers be “held harmless” from the decisions of other individuals and businesses to integrate solar DG into their electricity mix. Therefore, a set of basic principles should guide the establishment of net metering policies for solar DG.

These principles should include:

- Net metering policies should balance the needs of all consumers – both those with solar DG installations, and those without.
- A fair payment for excess solar DG electricity that provides net metering customers with the same, competitive price paid to other solar power generation facilities; not above-market rates that result in higher costs for all electric customers.
- If solar DG customers choose to separate from the electric grid, they should not have to pay for facilities that they do not use.
- But, if a customer continues to use the electric grid, including for obtaining back-up power or to earn credits for excess solar DG electricity sales, they should share in the costs of operating, maintaining, and enhancing that grid.

The FTC can play a role in assuring that these principles are adhered to as net metering policies and associated excess generation rates are set throughout the country.

### **Conclusion**

The mission of the FTC is to protect competition and consumers, not to advance the business model of particular competitors. Paying solar DG customers above-market rates for their excess energy sales, to the detriment of all other electric ratepayers, is anticompetitive and serves to increase costs for all consumers. American businesses and manufacturers strongly support competitive markets and competitive prices. Net metering policies that proscribe a full

retail rate credit provide a subsidy that is no longer needed to facilitate the installation of solar DG facilities. Instead, due to the widespread buildout of such facilities, outdated and unfair net metering policies serve to increasingly shift necessary electric grid operations and maintenance costs from solar DG customers to those without such facilities. Consistent with its mission to protect America's consumers, the FTC should encourage the elimination of these subsidies as both pro-competition and pro-consumer protection. With a purely competitive market for solar DG, which protects both solar DG and non-solar DG consumers, the rapid expansion of solar electricity will be able to continue on its own merits, without unnecessary and inequitable impacts on electric bills.

Sincerely,



Karen Harbert