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Federal Trade Commission
Office of the Secretary
600 Pennsylvania Avenue N.W.
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Washington, DC 20580

Via electronic submission through http://ftcpublic.commentworks.com/ftc/solarworkshop

RE: Solar Electricity Project No. P161200

I. Background and Introduction

The National Rural Electric Cooperative Association ("NRECA") appreciates the opportunity to submit comments on the above captioned item to be considered at the workshop on competition and consumer protection issues in solar power. This submittal highlights NRECA's main positions under the workshop's net metering, competition, and consumer protection topics. NRECA intends to submit a more complete set of comments on August 22, 2016.

NRECA is the national service organization for America's Electric Cooperatives. The nation's member-owned, not-for-profit electric co-ops constitute a unique sector of the electric utility industry – and face a unique set of challenges. NRECA represents the interests of the nation's more than 900 rural electric utilities responsible for keeping the lights on for more than 42 million people across 47 states. Electric cooperatives are driven by their purpose to power communities and empower their members to improve their quality of life. Affordable electricity is the lifeblood of the American economy, and for 75 years electric co-ops have been proud to keep the lights on. Because of their critical role in providing affordable, reliable, and universally accessible electric service, electric cooperatives are vital to the economic health of the communities they serve.

Retail rates should be designed to treat all consumers equitably and designed to minimize cost shifting among consumers. In order to achieve these goals, rates and cost-drivers should be aligned as much as possible. NRECA is concerned that net metering policies lead to cost shifting among consumers. Cost shifting occurs because net metering customers underpay the fixed-costs they impose on the system and because utilities are required to pay significantly more than avoided cost for a resource that cannot be dispatched reliably.

In regard to competition issues, it is important to understand that electric cooperatives and solar vendors do not provide consumers with the same services. Electric cooperatives do not simply sell a commodity, kilowatt hours. Cooperatives sell safe, affordable, and reliable electric service that is available 24 hours a day. On the other hand, most solar providers only provide electricity to consumers when the sun is shining. Because utilities and solar vendors do not provide the same services, there are no competition issues.

II. Net Metering: Pricing Solar DG at Retail

NRECA is concerned that net metering policies lead to cost shifts among consumers.

Net metering policies require utilities to pay consumers the retail price for wholesale power. The retail rate utilities charge includes not only the marginal cost of power, but also recovers costs incurred by utilities for transmission, distribution, generating capacity, and other utility services not provided by the customer-generator. This has two adverse impacts on other consumers.

First, it means that the compensation that utilities are paying for wholesale power from net metered customers is disconnected from the value that the utility and its other consumers obtain from the generation. The policies require utilities to pay well above avoided costs for power that cannot be scheduled or dispatched reliably to meet system requirements.

Second, net metering allows customers to under-pay the fixed costs they impose on the system. Although utilities typically bill by the kWh, that is not what they are selling. They are selling the assurance that safe, reliable, and affordable power will be available to all their consumers all the time (absent a serious contingency such as a major storm), at reasonably stable prices over the long term. To accomplish that, a utility has to manage a portfolio with sufficient generation, transmission, distribution, and distributed energy resources (demand response, distributed generation, and distributed storage) to meet the peak requirement of the consumer. For historical reasons that no longer apply to many customers with their own generation, utilities have recovered the costs of that portfolio of resources through a kWh charge. When the net meter rolls backwards, it understates the total energy used by the consumer, and thus understates the consumer's impact on the fixed costs of the system. It also understates the consumer's total share of other fixed charges borne by all consumers such as taxes and public benefits charges. This dynamic leads to cost shifting among consumers. This problem is also particularly acute when the customer's generation output does not match up with the utility's peak demand, as is often the case with solar generation.

There are policies that support renewable technologies like solar without shifting costs between consumers:

- Provide tax credits for consumers that install renewable generation;
- Appropriate funds for research, development, and demonstration projects aimed at lowering the costs of DG;
- Implement net billing programs. Such programs typically:
    - Permit interconnection of customer generation to the grid;

- Permit consumers to use their generation to reduce their consumption of utility power;
- Ensure appropriate compensation to consumers for their net excess generation at reasonable rates;
- Ensure consumer generators pay an appropriate share of system costs, protecting other consumers from the imposition of inequitable cost shifting.

III. Competition Issues

The following section provides NRECA's response to major questions under the topic of competition.

1. Is solar DG a competitive threat to distribution utilities? Does this depend on whether the distribution utility owns generation assets?

Putting aside for later discussion those utilities that get directly into the business of selling PV to retail consumers, solar DG is not a competitive threat to distribution utilities because the two do not sell the same service. Electric cooperatives do not sell a commodity (kilowatt hours). Electric cooperatives may bill based on kWh as a matter of historical convenience, but that isn't the product co-ops sell. Cooperatives sell safe, reliable, and affordable electric service at reasonably stable rates over the long term. In order to provide this service, cooperatives manage risk and optimize the system to meet various business and regulatory goals, including safety, affordability, matching resources to load profile, support for new technologies, job promotion, economic development, fuel diversity, fuel efficiency, temporal diversity (long, medium, and short-term resources), regulatory compliance, environmental sustainability, reliable operations, power quality, locational value, utilization of non-generation alternatives, and counter-party risk. In other words, cooperatives sell the assurance that the lights will turn on when you flip the switch and your beer will stay cold, all at an affordable and reasonably stable cost.

Efforts to meet consumers' and regulators' expectations requires careful balancing and careful strategic planning as investments of limited funds in one area can reduce funds available for another and the goals can conflict with each other. For example, investments aimed at increasing safety, enhancing reliability, and protecting the environment can make power less affordable. Mitigation of long-term price volatility can increase power costs today. And, efforts to get the lights on more quickly following an outage could undermine safety.

The greatest challenge of all, of course, is that the utility cannot look at different generation, transmission, distribution, and demand-side resources effectively in isolation. Rather it must look at all of its resource options in light of how they fit with each other, with the legacy grid, and with the other decisions that may be made by the other 4000+ industry participants. Each utility must carefully choose among its resource options and manage them in an integrated manner that permits it to meet all of its obligations, including safety, reliability, low cost, environmental compliance, etc. in the most efficient manner possible.

In contrast, rooftop solar providers largely do not offer the same service utilities do. Most solar providers provide energy to consumers only from a single generating resource and only

when that resource works and when the sun is shining. Some market to consumers an opportunity to change their environmental footprint. Some market to consumers an opportunity to reduce their electric bills – not to stop receiving safe, reliable, affordable electric service from their utility – but to reduce the cost of that service much the same as does someone who sells energy efficiency audits and upgrades.

Solar DG does not compete with distribution cooperatives to provide the service that cooperatives provide to member-owners. When selling solely to end use consumers, solar DG providers offer a different product in a different market.

To the extent that there is competition with utilities, that competition is in the upstream market. Retail solar providers that over-size generation to provide more power than their immediate retail consumers are using at any moment, and thus seek to sell net excess generation to the consumer's utility, are competing with the utility's own generation and with every other competitive provider that could offer that energy to the utility.

The solar provider does so at a significant regulatory advantage because PURPA 210, state net metering laws, and other state policies require utilities to buy that power, often at a premium. Ordinarily, a utility would acquire that same kWh of power from its own resource or from the third party resource that provide what they need, when they need it, where they need it, in the manner that best fits with the rest of their resource portfolio, at the lowest cost.

One or more retail solar providers with significant penetration in a utility's service territory might displace generation from an existing low-cost generator, might increase the cost of operating that generator by forcing it to ramp up and down in an inefficient manner that increases total fuel use, emissions, and maintenance costs, and might require the utility to invest in new fast-ramping resources to ensure reliability in light of the solar resource's intermittency and because the solar resource is dropping in the afternoon at the same time that the utility's load is rising towards its evening peak. In a competitive environment, the utility might not invest in the solar resource because of those costs. If it did invest in solar (its own or a PPA with a competitive supplier), it might do so in a larger scale resource over which the utility has some control in order to better integrate that resource into its portfolio and reduce total costs. In the present regulatory environment, the utility has no choice and the rooftop solar displaces competition to provide the utility other options in the upstream power market.

2. Are there barriers to entry not related to regulatory policies? If so, is antitrust enforcement an appropriate tool to address them?

Antitrust enforcement is unnecessary to encourage entry by rooftop solar providers because there are no competitive issues to be addressed. As discussed above, distribution utilities and rooftop solar are largely not providing the same service to retail consumers. (see answer to question 1). Despite claims that certain regulatory policies discourage solar DG deployment, current regulatory policies provide significant assistance, not barriers to entry for solar DG. For instance, the Public Utility Regulatory Policy Act (PURPA), Net Energy Metering (NEM),

Renewable Portfolio Standards, and other state policies that require interconnection in a favorable manner to solar entry are examples of this type of assistance.

Not only are there significant policies that favor market entry for distributed solar, existing rate design is a regulatory policy that serves as a further enhancement to entry. In order to give efficient price signals, rates should ideally track cost causation as much as possible. Rate changes are often made in order to reduce the cross subsidization between consumers and to track costs more closely. The rates are not changed to make solar less competitive. The fact is, however, that solar programs are often designed and marketed to exploit existing utility rate structures that were not designed to address the cost causation attributes associated with the advent of wide-scale distributed generation. When new rate designs are adopted to reduce these inefficiencies, then cost recovery more closely tracks cost causation, and solar DG no longer provides consumers the same apparent advantage.

3. **If regulatory policy affects entry conditions, is there a role for antitrust enforcement or competition advocacy to encourage entry? Is antitrust an appropriate tool to police efforts by utilities to maintain or strengthen regulatory barriers to entry from solar DG firms? Can such efforts by utilities be characterized as exclusionary conduct under the antitrust laws? Or is regulation the preferred tool to shape electricity distribution going forward?**

Antitrust enforcement is unnecessary in this context because there are no significant competitive issues between distribution utilities and retail solar providers. (see answers to questions 1 and 2).

Moreover, regulation is the preferred tool to shape electricity distribution going forward because regulation is able to take into account a broader range of public interests than antitrust law, including safety, reliability, affordability, environmental protection, economic development, promotion of technology, and many more. Regulators take a long term view and see the market from a holistic and broad perspective. They must adjust expectations on each goal, prioritizing among goals, and hold utilities accountable while leaving them free to find the best means to achieve the regulators' priorities in light of their local conditions. Frequently, these are disparate objectives and as such, need one central decision-maker that understands all the components that go into finding a path to attain the objectives. In the electric cooperative model, it is the board of directors, drawn from the membership and directly elected by the membership that serves this goal. In light of member-preferences, it must balance among competing goals and make decisions that meet the needs of all the members. Many states, the FERC, and PURPA itself recognize that cooperative boards serve as effective regulators.

In an industry as comprehensively regulated as the electric utility industry, with regards to an issue like integration of solar resources that is subject to so many layers of federal and state

regulatory direction, it would be a mistake to add an additional layer of antitrust enforcement that could only interfere with the federal government's and states' efforts to meet a wide range of policies.

4. Should utilities be permitted to offer rate-paying customers utility-supplied solar PV panels or access to community solar installations?

NRECA believes that consumers, through the cooperatives they own and govern should have the right to pursue any business enterprise that will assist in meeting their needs and their community needs, including utility-supplied solar PV panels or access to community solar installations. Consumers should have the right to decide from whom they want to buy the service, especially if those consumers own the utility. It is important for electric cooperatives to have the flexibility to voluntarily provide local communities with varied customer services.

Due to economies of scale, scope and integration, utilities have a broad perspective and a long term view and the ability to take advantage of pro-consumer efficiencies so they can provide more value to the system as a whole and benefit all consumers. If solar is to be implemented in the distribution system, local cooperatives are well positioned to understand the impact, and how to optimize benefits and minimize costs to consumers.

Electric cooperatives are a trusted resource for their member-owners. This makes them ideally situated to offer consumers the ability to pursue DG projects with local conditions in mind. In fact, the nation's electric cooperatives consistently score highest in measures of customer satisfaction in the utility sector.

In recent years, solar has become the fastest growing distributed resource pursued by distribution co-ops. There are numerous business models available, and many include partnerships with third-party solar vendors. The community solar model offers a very attractive model for increasing deployment of PV solar, allowing any consumer who wishes to do so the ability to buy into the system. This includes renters or those who do not have suitable roof space or credit for installation at their home or business. Ownership can be retained if a participant moves elsewhere within the same utility's territory, or can be sold back or transferred if they move away. The community solar model is a particularly good fit for cooperatives since they are by their nature consumer-centric organizations.

This type of prudent solar deployment could help the economies in parts of rural America and in certain areas have the potential to create value for cooperative member-owners and help put the nation on a course towards a sustainable energy strategy.

5. **What is the state of competition between solar DG firms and regulated utilities? How is competition affected by whether the utility offers distribution service only, electricity supply only, or both?**

See answer to question 1 and 4.

Some utilities may choose to compete head-to-head with providers of solar energy by offering consumers the opportunity to purchase solar energy from rooftop installations, community solar, or utility scale solar. However, when the utility chooses to offer solar energy, it benefits from inherent efficiencies of scale, scope, and integration. For example, larger scale solar has lower investment costs and lower integration costs than individual residential rooftop solar. Consumers should be permitted to benefit from those efficiencies when they ask their utility to provide them with solar power.

6. **How is this competition affected by the fact that regulated utilities earn revenues that are based, in part, on regulated rates of return?**

As mentioned in question 1, utilities may bill based on kWh as a matter of historical convenience, but that is not the product utilities sell in traditionally-regulated states. Utilities receive a regulated rate of return on safe, affordable, reliable service over long term because that service is a natural monopoly.

IV. Consumer Protection Issues

NRECA is committed to protecting the interests of consumers as it relates to the installation of solar PV systems.

Consumers can obtain information about installing solar PV from a number of sources. Because electric cooperatives are consumer-owned and consumer-governed, cooperatives often provide energy advice to their member-owners. Cooperatives are known as a trusted resource, and often assist their member-owners in making energy choices that work for them. In order to more efficiently facilitate the installation of a solar PV system, NRECA encourages consumers to go to their cooperative to receive relevant information.

Another resource for consumers is a recent report by Dr. Reichel from the Louisiana State University AgCenter, "Solar Power for Your Home: A Consumer's Guide."[1] This guide provides consumers with an objective step by step process on how to decide whether solar PV is a good fit.

[1] Reichel, Claudette Hanks. *Solar Power for Your Home: A Consumer's Guide*. LSU AgCenter. 2015. http://www.lsuagcenter.com/portals/communications/publications/publications_catalog/home%20improvement/energy/solar-power-for-your-home--a-consumers-guide

A central goal in ratemaking is that consumers should be treated equitably and cost shifting between consumers is minimized. In order to achieve this goal, rates and cost-drivers should be aligned as much as possible. This way, cost shifting between solar DG and non-solar DG consumers is minimized.

Solar DG consumers should be treated in an equitable manner. It is the job of regulators to determine that costs to consumers are just, reasonable, and fairly allocated. The landscape of the underlying program may change. For example, if the number of net metering customers increases significantly over a period of time, it is the responsibility of the regulators to reconsider the impact of the program upon all customers.

V. Conclusion

NRECA reiterates its appreciation for the opportunity to submit comments for consideration at the workshop. America's electric cooperatives are committed providing their member-owners with safe, affordable, and reliable electric service. As mentioned, electric cooperatives sell the assurance the lights turn on and the beer stays cold 24 hours a day. Electric cooperatives do not provide a commodity product. Because of this, electric cooperatives do not compete with solar providers. If you have any questions, please do not hesitate to contact me. We look forward to submitting further comments to this docket and working with you on this issue.

Respectfully submitted,

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