

STATE OF MARYLAND

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BILL NO.: **Senate Bill 481**
Community Solar Energy Generating System Program

COMMITTEE: **Senate Finance**

HEARING DATE: **March 3, 2015**

SPONSOR: **Senator Ramirez et al.**

POSITION: **Oppose**

Senate Bill 481 creates a new Section 7-306.1 in the Public Utilities Article to establish a Community Solar Energy Generating System Program. The Bill would allow “subscriber organizations” to own and operate community solar systems on behalf of “subscribers.” The Bill would permit regulated electric utilities to seek approval from the Public Service Commission (“Commission”) to own and operate such systems on behalf of “subscribers.” The Bill would also require the Commission to adopt regulations for consumer protection and interconnection with electric companies and to create a tariff structure for subscribers to receive “credits” consistent with those provided under the current net energy metering law. While OPC supports the eventual development of community solar initiatives, and previously has supported a pilot

program for community solar generating facilities,¹ we oppose Senate Bill 481 for the reasons stated below.

Prior OPC Positions on Community Energy Bills

OPC has submitted testimony on community energy bills, which have been introduced every year since 2012. In general, OPC has supported the concept of community energy, but we have favored the adoption of pilot programs and assessments, including the study of relative costs and benefits, prior to any wholesale adoption of community energy (including community solar).

The first community energy bills (House Bill 864/Senate Bill 595) were introduced during the 2012 legislative session, but did not pass. However, at the request of the Senate Finance Committee, the Public Service Commission did direct a PSC Work Group, called the RM 41 Net Energy Metering Work Group, to consider a number of questions related to the feasibility of community energy facilities. OPC actively participated in that work group, which produced a Report.

In 2013 House Bill 1128/Senate Bill 699, which reflected many of the consensus recommendations contained in that Report, were introduced. OPC supported those bills with amendments, although they did not pass. Of particular importance to OPC, those bills would have established a three year pilot program under the Commission's oversight, with size and other limitations, and required the submission of an assessment report to the General Assembly after completion. A significant component of that pilot would have been an assessment of the cost and benefit implications of community energy facilities for *both* participating customers

¹ In 2014, OPC supported with amendments SB786, which would have established a community solar pilot program.

("subscribers") and utility customers who are not participating in net metering or community energy initiatives. Those bills did not pass.

Finally, in 2014, OPC supported with amendments House Bill 1192/Senate Bill 786, which would have established a three year pilot program, with an assessment report provided to the General Assembly. Again, OPC supported a fuller assessment of the operation of community energy programs, including an evaluation of both the costs and benefits related to these programs, particularly as they relate to subscribers and non-participants. Those bills did not move forward either.

Community Solar Generating Facilities

Community renewable energy programs (primarily solar programs) and net energy metering, actual or virtual, have been topics of discussion for the past few years in Maryland and elsewhere. In general, community solar projects permit utility customers who cannot, or do not want to, install solar generating facilities on their premises to get the benefit of "virtual" access to the output of such solar facilities installed at a different location. A utility customer's share of the allocated electricity from the community energy solar facility would be subtracted from the customer's electricity usage for purposes of Billing for energy usage by the local utility. In effect, this program would permit the aggregation of electricity customers to "purchase" the output of such a facility. The customers, known as "subscribers," may receive credits through "virtual" net energy metering.

OPC has supported the eventual development of community energy programs as a way to allow customers who experience barriers to installation of their own renewable systems to obtain benefits indirectly through a subscriber system. These programs have been identified as a way

for renters, low-income and moderate income customers, as well as customers who cannot install renewable facilities on their property, to participate in the adoption of renewable energy generation.² By contributing to overall supply diversity, these initiatives also may provide certain benefits for reliability and price stability for utility customers.

While there are benefits, there also are complexities, including costs and cost-shifting for customers as a whole. Therefore, OPC has supported legislative initiatives to the extent that they establish pilot programs and opportunities to conduct studies of the relative costs and benefits of these programs before they become full scale initiatives.³ Unfortunately, Senate Bill 481 takes us back to square one by (1)proposing a non-pilot program, (2) not providing for any study or assessment of the relatives costs and benefits related to community solar and virtual net energy metering, and finally, (3) permitting electric companies to get into the business of owning or operating community solar and having all of their utility customers pay for it.

The Office of People's Counsel has the following concerns with regard to Senate Bill 481:

1. **Full-scale implementation without any pilot program or study.** The Bill provides for full implementation of a community solar program, instead of adopting a more deliberative process, conducted by the Commission, to assess system reliability and integration issues and to properly evaluate the benefits and costs, individual and system-wide, with these types of programs.

² See, for example, The Abell Foundation Report, "Clean Energy for Resilient Communities: Expanding Solar Generation in Baltimore's Low Income Neighborhoods at <http://www.abell.org/reports/clean-energy-resilient-communities> .

³ OPC has submitted testimony this year in support of Senate Bill 398 (Public Service Commission – Community Solar Projects or Virtual Net Energy Metering – A Study).

While OPC acknowledges that costs and benefits may flow between the participating customers and the customers who do not participate, there is no standard methodology to assess costs and benefits for participants and non-participants of net metering and properly allocate the net costs and benefits to the utility customers. The Bill itself seems to indicate that only “benefits” will flow as a result of these programs. Nowhere is there any acknowledgement that there may be costs and that the possibility exists that there may be negative impacts for both participating customers (“subscribers”) and customers who are not participating in net metering or community energy initiatives.

Maryland has had “rooftop solar” facilities and net energy metering for a number of years, While the growth from year to year in percentage terms is significant, rooftop solar remains a minute fraction of overall generation. However, community solar programs and the related virtual net energy metering have the potential to exponentially increase the development of solar facilities in Maryland. While solar installations and net energy metering may have little or no current impact on the operation and reliability of the existing utility distribution and transmission systems, and *de minimus* impact on the costs borne by non-solar customers, this will change with any significant increase in such solar installations and in net energy metering. In particular, as these programs grow in size and number, there is a likelihood that distribution rates could be affected. Therefore, consideration should be given to how to hold non-participating customers harmless from any unintended impact on their distribution rates. There is a need for a deliberative process to properly evaluate the benefits and the costs, individual and system-wide, with these types of programs, and assign costs and credits accordingly.

There is no standard methodology to assess the costs and benefits. The Electricity Innovation Lab of the Rocky Mountain Institute published a report, "*A Review of Solar PV Benefit and Cost Studies*" (April 2013) of 15 separate distributed solar PV cost benefit studies conducted between 2005 and 2013, and found that none of the studies did a comprehensive job of evaluating costs and benefits, that the studies used a wide range of estimated values, and that there was little agreement on how to estimate societal values. See http://www.rmi.org/elab_emPower. The National Renewable Energy Laboratory (NREL) and the Regulatory Assistance Project (RAP) subsequently published a report, "*Regulatory Considerations Associated with the Expanded Adoption of Distributed Solar*" (November 2013) at www.nrel.gov. Since then, states such as Arizona and Minnesota have adopted different approaches towards valuation of costs and benefits; and other groups such as NREL are actively looking at ways to assess the costs and benefits. All of these initiatives at least acknowledge that there *are costs*. The Bill as drafted fails to acknowledge this possibility.

2. **Payment of net energy metering credits to virtual subscribers.** The Bill automatically provides for credits to subscribers to be calculated as they would for net energy metering under PUA § 7-306. Prior bills provided for some minimum contribution by subscribers towards the cost of operating and maintaining the distribution system during a pilot study phase, but there is no provision for that in this Bill. Subscribers, who are "virtual" users of the community solar generating system, may avoid paying for the distribution system, even though they are connected to the utility distribution and transmission system and receive electricity through the grid. While this may be a non-issue with relatively small numbers of traditional net energy metering customers, it could become a much larger concern with an exponential increase with community solar, as it has in California, Arizona, and other states, and with virtual users.

3. Utility Participation and Ratepayer Cost Recovery. The Bill permits regulated electric companies to obtain Commission approval to construct community solar generating systems, and become generators. All utility customers would then become responsible for the costs of construction and maintenance of systems that serve certain subscriber-customers. While the Bill sets up a petition and Commission approval process, the interests of ratepayers in the aggregate cannot be properly addressed:

a. While the Bill mentions potential benefits to all ratepayers, it provides no mention of the costs, including incremental costs, related to such a system;

b. While subscribers would get the benefit of credits through virtual net metering, all non-subscribers get to pay the cost of the system, with some credit offset from sales of unsubscribed electricity and related services. The Bill would allow electric companies to include the cost of the generating system in rates if the Commission determines, outside of a full rate case, that the system will result in just and reasonable rates when included in an electric company's base rates. Quite simply, such a determination puts the cart before the horse. Under long accepted ratemaking principles and specific provisions of Maryland law, just and reasonable rates cannot be determined before an item of plant is "used and useful in providing utility service" for all utility's customers and for their benefit.

c. The requirement that the Commission approve or deny a petition within 120 days provides insufficient time for parties, including OPC, to obtain and assess the required information from an applicant. Section E(1)(II) requires a number of findings regarding, among other things, impacts to transmission and distribution lines, ancillary services, reliability and land

costs⁴. In order for all parties to have an opportunity to review this information, discovery is necessary. Additionally, expert witnesses will need to review all the information to come to a recommendation through testimony and evidentiary hearings. A mere 4 months is insufficient.

4. PUA Section 7-306.1(B)(2)(II) provides that certain potential subscribers will be given priority. In particular, priority will be given to those who are “most sensitive to market barriers.” This phrase is undefined, although there are references to renters, low-income and moderate income customers. However, while that may be a goal, there are no criteria, no requirements that such customers must be given priority by a subscriber organization, and no administrative oversight to assure such a public interest goal is met by developers of these projects.

For these reasons, the Office of People's Counsel requests an unfavorable report on Senate Bill 481.

⁴ As noted previously, the Bill has a one sided emphasis on benefits. If the Bill is given a favorable report , it must be amended to require the Commission to consider costs as well.