

**STATE OF MARYLAND
OFFICE OF PEOPLE'S COUNSEL**

Paula M. Carmody, People's Counsel

6 St. Paul Street, Suite 2102
Baltimore, Maryland 21202
410-767-8150; 800-207-4055
www.opc.state.md.us

BILL NO.: **Senate Bill 398**
**Public Service Commission – Community Solar
Projects or Virtual Net Energy Metering - Study**

COMMITTEE: **Economic Matters**

HEARING DATE: **April 2, 2015**

SPONSOR: **Senators Pugh and Muse**

POSITION: **Support**

Senate Bill 398 requires the Public Service Commission to convene a stakeholder workgroup to study and make recommendations on the advisability of establishing a program to allow customers to participate in certain community solar projects or virtual net energy metering.¹ The bill identifies certain areas to be examined by the workgroup, including:

- The costs and benefits associated with the transmission and distribution of the energy produced through a community solar project or virtual net energy metering (VNEM);
- Information on similar projects in other states;
- The allocation of solar renewable energy credits produced;
- Possible eligibility requirements for participating customers;
- Whether and how these projects or VNEM can help reduce the cost of compliance with the State's RPS standard;
- Whether and how these projects or VNEM have a substantially different technical impact on the distribution system than traditional solar net energy metering;

¹ Senate Bill 398 was amended in the Senate Finance Committee to modify the nature of the recommendations (adding "advisability") and incorporating additional topics to the study itself.

- Whether and how these projects or VNEM can expand access to ratepayers who want to invest in solar energy, including low-income ratepayers; and
- Any other matters deemed relevant to the establishment of the program.

The report to the General Assembly is due December 1, 2016.

Community solar programs and net energy metering, actual or virtual, have been topics of discussion for the past few years. 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.

OPC supports the eventual development of community energy programs as a way to allow customers who experience barriers to install their own renewable systems to obtain benefits indirectly through a subscriber system, and to contribute to overall supply diversity. 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

Community solar programs and the related virtual net energy metering have the potential to exponentially increase the development of solar facilities in Maryland. However, while solar installations and net energy metering currently 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. Costs and benefits will flow both ways between the participating customers and the customers who do not participate.³ With sufficient

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 No standard methodology has been developed 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

resources, the involvement of relevant stakeholders, and sufficient time allotted, a properly scoped study could help to support a viable community solar program and cost allocation structure that meets the State's public policy objectives and ensures that customers, participants and non-participants alike, pay reasonable rates.

OPC notes that it had opposed other community solar bills (House Bill 1087/Senate Bill 481) in initial testimony. OPC subsequently engaged in extensive discussions with the sponsor of House Bill 1087 and other stakeholders, and that bill ultimately was amended, received a favorable vote from this Committee and passed the House.⁴ In addition to other modifications, those amendments address three key concerns identified by OPC. Therefore OPC is supportive of House Bill 1087 with those amendments. The amended House Bill 1087:

- Establishes a 3-year pilot program, with a report to the General Assembly;
- Establishes a workgroup to study the value and costs of the pilot program and make recommendations on the advisability of establishing a permanent program;⁵
- While it allows electric companies to participate in the pilot program, provides no advance approval of any cost recovery from ratepayers for construction of such a generating system; and
- States that any virtual net metering calculations of the kilowatt-hours or value for the pilot program subscribers shall be "as the Commission determines," instead of automatically at the value set forth in PUA § 3-706.

With regard to Senate Bill 398, OPC believes that a Commission-sponsored study would be helpful and ultimately necessary as Maryland considers ways to encourage and expand distributed generation programs, such as community solar. There is a need for a deliberative

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.

⁴ A hearing on House Bill 1087 is scheduled today before the Senate Finance Committee. OPC will support that bill with those amendments.

⁵ House Bill 1087 incorporates some of the same requirements as Senate Bill 398, and includes a more comprehensive set of directives for the study. OPC recommends inclusion of those more comprehensive requirements in the Senate 398 study.

process, conducted by the Commission, to properly evaluate the benefits and the costs, individual and system-wide, with these types of programs, and assign costs and benefits accordingly.⁶ OPC supports the conduct of both a pilot program and study, as included in House Bill 1087, since Maryland specific data from the pilot program can help to inform the study. However, if a pilot program does not receive support from both chambers at this time, we believe that at a minimum a study should be performed before any community solar program is fully implemented.

⁶ See NREL Pre-printed report, “*A Valuation-Based Framework for Considering Distributed Generation Photovoltaic Tariff Design*” (February 2015), for a succinct identification of these steps, at www.nrel.gov.