



Massachusetts General Court

Before the Joint Committee on Telecommunications, Utilities and Energy

Written Testimony of Vote Solar

Regarding: Bills related to Solar Energy and Net Metering

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June 2, 2015

Introduction

Vote Solar appreciates the opportunity to submit comments to the Joint Committee on Telecommunications, Utilities and Energy (“Committee”).

Vote Solar strongly encourages the Committee to direct the Department of Energy Resources (“DOER”) and the Department of Public Utilities (“DPU”) to start processes to develop well-researched, long-term, and predictable solar policies for the Commonwealth. In addition, the current solar policies – including net metering – should proceed unimpeded in order to allow the solar market to carry on while the DOER and the DPU conduct their processes. Such an approach will continue to provide net benefits to the Commonwealth now and into the future.

About Vote Solar

Vote Solar is a non-profit grassroots organization working to foster economic opportunity, promote energy independence and address climate change by making solar a mainstream energy resource across the United States. Since 2002, Vote Solar has engaged at the state, local and federal levels to remove regulatory barriers and implement the key policies needed to bring solar to scale.

Vote Solar is particularly focused on rate design issues related to solar distributed generation, including the billing arrangement known as net metering. Recognizing the importance of this policy for supporting customer-sited solar and other renewables energy technologies, Vote Solar is actively participating in net metering and broader rate design regulatory proceedings in states across the U.S, including: Arizona, California, Colorado, Connecticut, Georgia, Iowa, Louisiana, Nevada, New Mexico, New York, North Carolina, Utah, and Vermont, among others.

Prior to joining Vote Solar, I worked for the DPU. At the DPU, I was the primary staff person on matters related to renewable energy. Of particular relevance to this testimony, I was the primary staff person at the DPU on everything related to net metering. As such, I’m intimately familiar with solar policy in the Commonwealth.

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Costs and Benefits of Solar

Distributed generation – especially solar distributed generation – is a clean, local, and valuable source of electricity. Distributed generation benefits the Commonwealth as a whole, not just the customer with the distributed generation. As the Net Metering and Solar Task Force (“NMSTF”) found, when all of the costs and benefits are taken into account for the Commonwealth, there are significant *net benefits* in every policy situation analyzed (NMSTF Task Report 3: Appendix B). Specifically, the *net benefits* ranged from slightly under \$8 billion to slightly over \$9 billion in a 2,500 MW scenario (*id.*). Please see Table 1 below.

Table 1: Calculation of the Net Benefits of Solar to the Citizens of the Commonwealth

	NPV Net Benefits	NPV \$/MWh Net Benefits	NPV Net Benefits	NPV \$/MWh Net Benefits
	2500 MW	2500 MW	1600 MW	1600 MW
SREC Capped	\$9,054,100,000	\$132	\$5,826,300,000	\$134
SREC Uncapped			\$5,945,300,000	\$137
Policy A Capped	\$7,918,500,000	\$112	\$5,600,100,000	\$125
Policy A Uncapped	\$8,446,700,000	\$120	\$5,900,900,000	\$132
Policy B Capped	\$8,380,400,000	\$119	\$5,687,600,000	\$127
Policy B Uncapped	\$8,827,700,000	\$126	\$6,053,300,000	\$136

Summary table derived from the NMSTF Task Report 3: Appendix B

Distributed generation reduces the need for the region to build expensive power plants, transmission lines, and distribution lines. Furthermore, distributed generation reduces the price of wholesale electricity by suppressing demand, which is especially valuable during peak periods of demand. These findings are consistent with Vote Solar’s experience across the country. Vote Solar is aware of numerous studies that have shown that the value of solar energy is greater than the costs associated with state-level solar energy programs (for additional information, see footnotes ¹, ², ³, ⁴, ⁵).

¹ Clean Power Research, Energy and Capacity Valuation of Photovoltaic Power Generation in New York, available at: <http://www.asrc.cestm.albany.edu/perez/publications/Utility%20Peak%20Shaving%20and%20Capacity%20Credit/Papers%20on%20PV%20Load%20Matching%20and%20Economic%20Evaluation/Energy%20Capacity%20Valuation-08.pdf>

² RW Beck for Arizona Public Service, available at: <http://files.meetup.com/1073632/RW-Beck-Report.pdf>

³ Austin Energy and Clean Power Research, *Designing Austin Energy’s Solar Tariff*, available at: http://www.cleanpower.com/wp-content/uploads/090_DesigningAustinEnergysSolarTariff.pdf. Also, *2014 Value of Solar at Austin Energy*, available at: <http://www.austintexas.gov/edims/document.cfm?id=199131>.

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When evaluating whether distributed generation is a beneficial policy to the Commonwealth, both the costs and the benefits must be taken into account. Focusing on just the costs paints an entirely inaccurate and disingenuous picture. If costs were the only consideration when building infrastructure, nothing – in the private or public sector – would ever be built. Investments require a weighing of both the costs and the benefits. I implore the Committee to consider the costs and the benefits together.

After examining the net benefits results for the Commonwealth as a whole in the NMSTF Task Report 3, the question shouldn't be whether we should continue to promote the development of solar, the only reasonable question is how we support the development of solar. Solar is an investment and a winning technology for the Commonwealth.

Massachusetts and the Future of Solar Policy

The entire spectrum of customers install distributed generation. Residential customers, including low-income customers, small commercial customers, large commercial customers, large industrial customers, farms, municipalities (including schools), state agencies, and non-profit institutions all directly benefit from distributed generation. Massachusetts is a success story for all ratepayers (not just solar customers!) when it comes to distributed generation, and net metering is a key component of the success story.

To date, the Commonwealth has been a leader on solar policy. Massachusetts' leadership is evident by the thriving development community, the deployment of solar throughout the Commonwealth, and the many benefits that everyone currently receives. Massachusetts programs such as virtual net metering, solar renewable energy certificates ("SRECs"), and Solarize Mass – to name but a few – have been success stories by which the rest of the country can learn. Now the General Court must help lead the way once again.

Solar in the Commonwealth is at an inflection point. As the NMSTF has demonstrated, there are disagreements on the future of solar policy in the Commonwealth. While I am confident that the disagreements in regard to solar policy can be resolved, such a resolution will not happen overnight.

As such, Vote Solar proposes the General Court pass a bill by which the DOER and the DPU conduct stakeholder processes to determine the future of solar policy. While the NMSTF was informative, the end result was insufficient to determine the future of solar policy in the Commonwealth. To start, the DOER should conduct a rigorous, fair, and transparent cost and benefit analysis with full stakeholder input. Such an analysis will provide more complete information by which policies can be constructed.

⁴ Vermont Public Service Board, *Evaluation of Net Metering*, available at: <http://psb.vermont.gov/sites/psb/files/Act%2099%20NM%20Study%20Revised%20v1.pdf>.

⁵ Crossborder Energy's evaluation of net metering in California, available at: <http://votesolar.org/wp-content/uploads/2013/01/Crossborder-Energy-CA-Net-Metering-Cost-Benefit-Jan-2013-final.pdf>.

Second, the DPU should start a proceeding to determine a fair compensation mechanism for the value that solar provides and fair compensation for the use of the grid. This proceeding should be informed by the cost and benefits study conducted by DOER.

Finally, DOER should create a more predictable and long-term incentive model that provides financial certainty to solar customers, solar developers, financial entities, policymakers, and all customers. Such a program can help reduce the costs associated with solar policies in the Commonwealth while simultaneously supporting the deployment of solar.

Unfortunately, these processes will take time. While these policies are being developed and deployed, solar should not stall in Massachusetts. Once again, solar provides net benefits to the Commonwealth, and the deployment of solar should not languish while the DOER and the DPU develop policies.

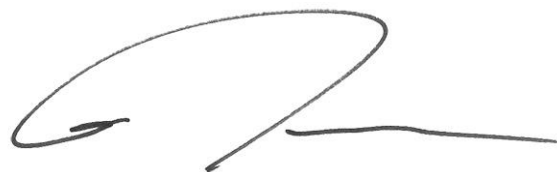
As such, the net metering caps should not be a constraint on the development of solar during the time that the DOER and the DPU are conducting their processes. The existing programs should continue as currently constructed in order to continue to provide net benefits to the Commonwealth.

Conclusion

Vote Solar encourages the Committee to direct the DOER and the DPU to start processes to determine the future of solar policy in the Commonwealth. In addition, give the distributed generation market an opportunity to continue while the Commonwealth evaluates solar policy in a comprehensive manner.

Vote Solar looks forward to further engaging this important discussion, and always remain available to answer questions from the Committee regarding our testimony. Vote Solar sincerely thanks the Committee for the opportunity to present our perspective. We look forward to working on this issue in the future.

Respectfully submitted this 2nd day of June 2015 by:



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