

July 10, 2017

Judith Judson, Commissioner  
Massachusetts Department of Energy Resources  
100 Cambridge Street 10th Floor, Boston, MA 02116

cc: Michael Judge, Director, Renewable and Alternative Energy Division  
Massachusetts Department of Energy Resources  
100 Cambridge Street 10th Floor, Boston, MA 02116

*RE: Solar Massachusetts Renewable Target (SMART), 225 CMR 20.00*

Dear Commissioner Judson:

The key to large penetration of solar electricity in the Commonwealth of Massachusetts, while maintaining value to all residents, is the development of Community Shared Solar. Studies show that between 60% to 80% of homeowners, residents of condominiums, apartment dwellers, and other electric rate payers either do not have a good site for solar energy harvest, or they do not own the property where the solar array would be located. At present these folks are left out of the bulk of the value of solar energy. Yes they receive the benefit of lower peak demand charges, carbon free energy generation, and grid stabilization benefits that increased solar penetration allows, but they miss out on the added value of lower electric rates, tax credits, and SREC compensation. So how does the state ensure equity in the value of solar to all its residents? Community Shared Solar (CSS) projects are the answer. CSS, develops projects at a much better kWh harvested to dollar invested, than conventional small residential systems. CSS provides lower cost electricity to the off takers than conventional utility supplied electricity, which is based heavily on fossil fuel. CSS projects provide more local energy generation and less economic dollars leaving the region. CSS projects have ownership flip models where individual account holders can take ownership of a portion of the array after the tax equity investor has made their money. Additionally, the state may be able to further incentivize CSS projects by paying to utilize the solar generation during grid blackouts to charge up energy storage facilities that may power micro grids.

Unfortunately at present recommendation the SMART program does not go far enough to compensate for solar power generation. Presently only 5% of solar installed in MA services low to income residents or affordable housing developments. SMART needs to incentivize this area further to uphold equity in the distribution of solar benefits. Low-income and shared solar projects usually have higher site development, customer acquisition and administrative costs than other types of projects. These costs will not diminish over time so reducing the value of the adders will make it much more difficult to develop low-income solar as the SMART program progresses. SMART needs to incentivize CSS, where we get our greatest benefit in terms of energy generated per dollar spent while maintaining equity in the benefits to all residents.

The bundled benefits that PV provides the commonwealth are:

- Carbon free energy generation to meet the Global Warming Solutions Act goals

- Lower grid congestion, saving us the cost of building more grid networks and generation plants
- Increased energy capacity, to avoid having to build new power generation facilities as we retire older plants.
- Distributed generation which makes us less vulnerable to terrorist attacks or weather events
- Local generation of energy which makes pricing more stable and less dependent upon oil and gas commodity pricing.
- Localized investment creates local jobs and keeps money in our economy
- Grid stabilization via advanced inverter technology.
- Local generation resources available for powering microgrids when there is grid trouble.

All of these benefits deserve to be fairly compensated, and the value should be equitably dispersed to all rate payers. Thus the need for further incentivizing Community Shared Solar under SMART. I suggest doubling the IRR from 5% as recommended by the Sustainable Energy Advantage, and eliminate the decline rate of all of the compensation adders. The value that all residents are getting for PV is far greater than the compensation rates proposed thus far. We will need to seriously ramp up the renewable energy generation in the state when we shift our transportation energy into electric demand.

Sincerely,  
Mike Kocsmiersky CEM  
Energy Engineer  
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