

Save our Solar - Fact sheet
H.4185, "An Act relative to net metering and solar power",
a bill now under consideration by the Massachusetts legislature

The current state of affairs sets the stage for a very well balanced diverse mix of large and small solar PV distributed around the Commonwealth of Massachusetts for the benefit of all residents, towns and businesses. Equal opportunity for the individual and community to contribute to reducing greenhouse gas emissions, support the local economy, and reduce utility costs into the future are all possible. We need to move towards a distributed, renewable energy powered electrical grid with energy storage.

The Solar PV world under H.4185 would look very different. It would move us into a less equitable, more centralized scenario with less access for the individual or community solution. Large solar PV systems would dominate the marketplace, utilities would continue business as usual, and the state would be hobbled in reaching the goal of a sustainable renewable energy future. The Commonwealth of Massachusetts would have failed to stand up to corporate interests and show the nation that everyone can participate, contribute and benefit from moving away from fossil and nuclear fuels.

Given the flaws of H.4185, but the real need to raise the net metering cap, we need a modest raise of the net metering cap, leaving the current incentive programs in place. This can be done by an amendment attached to another bill in this legislative session, which ends on July 31, 2014.

There needs to be discussion on the true value of solar PV in terms of reducing greenhouse gas emissions, distributing electrical generation across the grid, allowing communities and individuals to participate, supporting the grid during peak demand loads, pairing with energy storage solutions, and a myriad of other considerations too numerous to list. This discussion will not progress with H.4185. The Commonwealth needs the time to take proper evaluation of the situation. Not take hasty, ill conceived, rushed action which clearly sets back all the gains made in the last decade.

Current Net Metering Cap and Solar PV system status:

1. The net metering cap (based on the peak demand load) is 6% and divided between private and municipal at 3% each. The net metering cap needs to be raised. Net metering allows residential and commercial customers who generate their own electricity from solar power to feed electricity they do not use back into the grid.
2. There is no limit to the size of a PV system interconnected. Net metering is credited at full retail rates (distribution and generation) and you may allocate up to 100% of any credits to any electrical account in the same utility load district by using a Sch Z.
3. Virtual Net Metering (VNM):
For PV systems 1MW and under, VNM credits are at full retail rate. This means that a remote community shared solar project generating electricity can allocate the full retail value of the electricity to each member according to the amount of generation they have paid for.
4. Solar Renewable Energy Credits (SREC) 2:
This program covers all residents of MA whether in a Investor Owned Utility (IOU) or Muni Light and Power (MLP). SRECs have value for a 10 yr term. SREC2 established in April 2014 and is managed by the Dept. of Energy Resources (DOER). SREC 2 at the lowest level price allows a payback period for simple roof mounted PV systems (1-10kW) of 5-6 years.

The world of solar PV according to H.4185 as it was passed out of the Joint Committee on Telecommunications, Utilities and Energy.

1. The Net metering cap raised to 100% of peak load.

Solar PV will never be 100% of the peak load of any utility. There will always be another electrical source due to the nature of solar PV generation whether it is batteries or hydro or wind or other source. The solar industry and people of the Commonwealth can easily settle for a lower number of 50% or even 35% of the peak load for the net metering cap. There is no value to increasing the cap to 100% especially if it means allowing measures listed below. This is simply a tactic of the utilities to inflate the value of "No Net metering cap".

2. 1600MW is codified into statute.

The Governor's goal of achieving a cumulative goal of 1,600 MW of solar PV has been twisted by this legislation to severely curtail solar development. H.4185 establishes a strict limit of 1,600 MW of PV to be developed by 2020. To date, the Commonwealth is developing PV at a pace of 225-250 MW per year. The Bay State should have about 700 MW operating by the end of 2014. That leaves 900 MW to build out between now and the end of 2020, six years inclusive, or a pace of about 150 MW per year. That amounts to an immediate contraction of the solar market.

3. Minimum monthly bill (MMB):

All the solar PV systems will be affected by this MMB as they zero out for at least 6 months of the year. The net metering credit is used by the owner to offset less generation in the winter months. Current PV system owners have not been grandfathered out of this charge even though some of them purchased PV systems at a much higher cost (pre-2011). Adding the MMB will increase their payback period. There is no limit or pegging of the MMB in H.4185. Small PV system owners will bear more of the cost than larger systems for which \$5-10 is less of a concern. If the MMB were set at \$150, everyone agree that is it unreasonable. Functionally, the MMB will dampen and prolong the payback period and cause older non-SREC systems which zero out to have an electric bill for the first time in years. The MMB starts the conversation on the true value of Solar PV but doesn't end it.

4. Phase 2 Solar:

4a. Behind the Meter load is limited to the 3 year average electrical bill. The onus is on the customer to prove to the utility that they are entitled to build a larger system if they expect to add an electric car or heat pumps or any other new electrical demand in the future. How does new construction determine what is a 3 yr avg bill? Why should there be a limit on the PV system size on a residential roof? The legislature needs to be thinking forward towards installing as much solar PV as possible on every roof, parking lot, and barn. Not limiting the size of PV systems.

4b. "Behind the Meter" generation is NOT allowed to allocate Net Metering credit to any electrical account. NONE. Why setup solar PV systems that cannot share electrical credit with friends, family, other farm accounts, churches, or any one else who can't have solar PV for what ever reason? Currently, there are farms with a PV system installed on one electrical account that allocate the credit to the house account. We have a customer who has a PV system on the barn across the street from the house which allocates 100% of the generation to his house. The customer has no viable PV site at the house. H.4185 would not allow this customer to allocate net metering credits to his house account.

5. Virtual Net Metering:

There are preferred sectors, however all VNM will be at Private Class III rates (generation only). This will severely reduce the financial viability of community shared solar projects. The customer receives only a portion of the electricity cost allocated to their electrical account. Additionally, only one Sch Z will be allowed per yr. That is hardly enough for community shared solar where there could be a hundred members buying in at different times and even selling or transferring their share any time of the year.

		Virtual Net Metering Retail Rate = Distribution + Generation	Virtual Net Metering Wholesale rate = Generation only
Community Shared Solar (CSSC)	Buys 10 modules which generate 3720kWhrs/yr	At .14kWhr = \$520.80	At .07kWhr = \$260.40/yr
CSSC electric bill	\$60/month = \$720/yr Electric Bill already Accounts for the Distribution charge \$30. The remaining \$30 for generation.	Bill reduced to \$199.20/yr VNM rate nearly allows the payback period as Direct owner of Solar PV Depending on tax credits and SREC assignment.	Bill reduced to \$459.60/yr VNM rate greatly increases payback period for a group of people already disadvantaged due to lack of access to a solar site.

6. Declining Block Incentive:

6a. The 40 MLP towns will not be eligible to participate. This exclusion directly impacts current solar PV systems in MLP and all the residents of those 40 towns.

6b. The DPU would be in charge of setting the incentives and blocks with recommendations from DOER.

6c. The 15 year term could extend the payback period from 5 years to 7 or more years.

6d. As soon as the first high paying incentive blocks are filled, large solar industries will leave the remaining lower value blocks to smaller, later systems.

6e. The Qualifying Facilities (QF) or Merchant PV plants, will have their incentive rate fixed at interconnection. QF's will have a value they can depend on not going down when electrical rates go up.

6f. All other sites will be a floating inverse rate depending on the price of electricity.

6g. The effect on the residential and small business sector will be to dampen and reduce the rate of installations because they will be confused by a set of new incentives to digest. This uncertainty of changing everything in mid stream will halt the progress made in residential and small business PV installations. The ripple effect if severe enough, will cause local installers and distributors to cut jobs.

WHAT to DO? To encourage further development of small and community solar, urge your representative to reject H4185. Ask them to Support an net metering amendment allowing solar to continue, with public policy input and participation:

- Raise the net metering cap by this stepped schedule:
 2015 cap at 12%,
 2017 cap at 20%,
 2019 cap at 28%
- Establish a public process for a detailed analysis of Commonwealth Solar policy.

Thank you for your timely attention in this matter!

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