TOWN OF ASHBY
New Energy Resource Committee
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Massachusetts Department of Energy Resources
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Via email: DOER.SREC@state.ma.us

RE: Comments on New Solar Incentive Straw Proposal

The Ashby New Energy Resource Committee came together in the Spring of 2015 to investigate expanding solar energy in our town. We organized with high hopes of providing: 100% of the electricity needs of municipal buildings with solar power, offering residents the opportunity of shared community solar, and making individual residential systems affordable for homeowners.

We are a small committee of just 4 volunteers within a small rural town 60 miles northwest of Boston. We have a very small commercial base in town. But what we do have is a community that has been at odds with its investor owned electric utility, Unitil, since the ice storm of Dec 2008. We also have a progressive SelectBoard who has been searching for ways to reduce costs for the town and its citizens while turning the town greener and greener. We are a Right-to-Farm community who earned our Green Community designation from the Commonwealth in 2014. However, since we are rural, many solar developers have researched the viability of large solar installations in the town because of our relatively inexpensive, large tracts of open land.

As a result of the above factors, we were able to create and run Solarize Ashby outside of the MassCEC program. Our program was successful in every measurement: we reached the top pricing tier of $3.10/w; 100 kW was installed on 14 homes; we increased our citizen's general knowledge of solar; we increased installs across Ashby, outside of our Solarize Ashby program, by exciting interest among both residents and installers; and, as a result, the installed solar base in Ashby is currently about 10% of all residences.

Now that the Solarize Ashby program has concluded, we would like to revisit providing green energy to the municipal government and encouraging community solar. However, the new incentive program, as currently outlined, will provide us with some serious challenges to our goals:

- There is nothing in the incentive that will address our utility's reluctance to update/enhance the current infrastructure to accommodate new solar generation. This effectively leads to circuit caps rather than net metering caps.
- There is no mention of whether the Mass Solar Loan program will continue, which was a great way to make solar available to lower income residents without upfront costs.
- The incentives associated with low income are tied to electricity rates, something more often encountered in cities and low income housing developments than in rural towns.
- There is no recognition of the high install costs outside of metropolitan centers, and especially in rural areas.
- The model shown in the straw proposal uses data from National Grid, which is entirely unrepresentative of our utility's charges for electricity.
- The declining blocks of incentives seem to rely on data from National Grid, and are worthless after the first block for Unitil.
- Municipalities need an adder.
- The siting criteria, wonderful as they appear, are undercut by leaving the exceptions to them undefined.

We will address each of these challenges and offer suggestions for reducing the challenge.

There is nothing in the incentive that will address our utility's reluctance to update/enhance the current infrastructure.
In research conducted by at least 2 commercial solar developers looking to locate solar farms in Ashby, Unitil required payment from those developers to even consider their applications. This was, purportedly, to cover analysis of their existing infrastructure and any enhancements that might be required to accommodate the projected increase in electricity on their lines. While this might make sense the first time the research was conducted on a line, requiring payment by the 2nd or 3rd proposal on the same line says something is amiss with either the analysis or their approval process. Please assure that past circuit analyses will be available for use to keep costs down.

While asking for such circuit analysis payments for a large project might make sense, asking for a similar analysis on a residential system is ridiculous! The $300 analysis fee that started being charged for residential applications partway through our Solarize program added roughly $.06/W to the cost of a system (based on a 5 KW system). Unitil, in our view, wanted to make it as hard as possible for "too many" customers to opt out of their high priced electricity.

At least with the SREC program, there was a carrot and stick approach for pushing Unitil towards buying green energy. That, alas, appears to be gone. Without SRECs there is not even a way to push them to upgrade their infrastructure to transport the solar energy being generated by others. And so, with Unitil, it will take the equivalent of an ice storm disaster to make the Commonwealth take notice of their lack of maintenance.

There is no mention of whether the Mass Solar Loan program will continue, which was a great way to make solar available to lower income residents without up front costs.
Perhaps the Mass Solar Loan program is outside of the new solar incentive proposal. But, we would really like to see it mentioned or linked in some way. For low to moderate income residents, having a low cost loan, with relaxed credit requirements and the possibility of reduced principal, made choosing to own solar an expense that was affordable rather than just an unattainable dream. And owning the solar PV system on

your roof, and eventually having free electricity, is a much better investment than paying someone else a somewhat lower electric rate for the next 20 years.

The incentive for community solar and low income are tied to electricity rates, something more often encountered in cities and low income housing developments than in rural towns. There is no recognition of the high install costs outside of metropolitan centers, and especially in rural areas. Ashby is a lower middle class town. While other towns who run Solarize programs have homes well over $1million in price, for whom solar PV system installation is just another check to write, Ashby's median home value was about $244,184 in 2013 with an estimated per capita income in 2013 of $30,491 (source: http://www.city-data.com). However, there are no subsidized housing units in Ashby. This doesn't mean that there are no low cost homes in Ashby, it just means that there are no government programs supporting those homes.

So, tying an adder to the proposed feed-in tariff for low income homes based on the R2 rate rather than the income of the residents is just another hurdle for those living in rural small towns and for Community Solar.

While there are very few rental units in Ashby, those that exist have no options for solar other than Community Solar. The one developer who was researching investing in/building a Community Solar installation was warded off by Unitil's request for $10,000 up front for the application to cover research/analysis of the line's ability to manage the power.

While there are some solar installation businesses which service the central and western parts of Massachusetts they incur high transportation and logistics costs. Perhaps an adder for rural installations for solar could be made available to Community Solar and Low Income residents. Creating this new incentive would address the increased costs, and protect green jobs beyond Rt. 495. This might also enable the developers to counter tactics by utilities like Unitil as well as the higher costs of installing in rural communities.

The model shown in the straw proposal uses data from National Grid, which is entirely unrepresentative of our utility's charges for electricity.
We understand that the cost of solar is declining, but we have yet to see this trickle down to the consumer level. Nonetheless, the model shown in the new plan is from National Grid data, with rates starting at $.16-.18/kWh. The graphs are drastically different for Unitil data, with rates starting at $.24-.26/kWh. With Unitil data, the incentive of $.30/kWh for the first block results in a net incentive of $.04-.06/kWh. That's $240-360/yr for a 5KW system producing 6MWh/year, which is hardly enough to meet even the first couple of payments on the cost of the system.

Why this proposed new incentive would use the National Grid model is beyond us. Please take another look at this pricing structure from the standpoint of Unitil pricing per kWh.

The declining blocks of incentives seem to rely on data from National grid, and are worthless after the first block for Unitil.
The assignment of 5MW per block for Unitil, with a 5MW maximum project, could easily close-out with only one or two large projects.

We need a significant residential carve out for the blocks – perhaps as much as 50% – to benefit all taxpayers. This would be similar to the current exemption from the net metering cap for residential installations.

And, as mentioned before, showing National Grid's data for the model leaves the impression that the incentives will continue through many blocks. However with a reduction in the feed-in tariff of 20% with each block, the effect of reducing blocks in the Unitil area of service will reduce the net of the feed-in tariff incentive to zero with entry into just the second block.

Municipalities need an adder.
An adder of some amount would make sense for projects selling their energy to a municipality. Municipalities cannot take advantage of the Federal Tax Credit. The advantage of a separate net metering cap has also been taken away. It's not uncommon to have a slightly different program for government projects. This would benefit all taxpayers.

With the suggested declining block incentives, municipalities would be fighting with developers of 5MW projects for a place in that first block. Under Unitil's allocation of 5MW for the first block, that space would be gone as soon as the new incentive begins accepting applications. Perhaps a 20% carve out for municipalities would ensure that the entire block doesn't go to one or two large developers.

The siting criteria, wonderful as they appear, are undercut by leaving the exceptions to them undefined.
Adhering to the requests of Mass Audubon and other Conservation groups to stop incentivizing the clearing of conservation and Chapter 61 land for solar installations is great! But, if you're going to allow them to be overridden whenever it's convenient, are they really worth the paper they are written on?

Here in Ashby we have just lost 24 acres of Chapter 61 forest to an out-of-state solar installation incentivized by the Commonwealth to provide solar to a nearby municipality's low-income housing program. We lose our trees; they overload our lines; and someone else gets the solar power. The new proposed incentives agree that this is not the desired outcome of solar incentives. We request that you NOT create any opening to allow exceptions to the necessary siting criteria. Define the criteria; then stick to it.

Massachusetts has made great strides in increasing the percentage of installed green energy and in building a viable, strong business sector with solar. We think that our suggestions, and perhaps those of others as well, could make this new incentive program something that will continue to keep Massachusetts as a leader in the country for solar and something to be proud of.

Respectfully submitted,

Ashby New Energy Resource Committee:

Paul McGrail, chair
Roberta Flashman
Mark Haines
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