

April 11, 2021

To: Mr. Seth Berry and the Maine State Legislature

From: Thomas Klak, 166 Simpson Rd, Saco 04072  
207-391-9496 tklak@une.edu



Re: L.D. 1025 An Act to Allow a Customer with a Net Energy Billing Arrangement to Annually Donate Any Unused Kilowatt-hour Credits

Dear Member of the Maine State Legislature,

I would like to make two recommendations regarding L.D. 1025.

I draw upon my eight years of experience as a solar residential investor in Maine to make these recommendations. I have expanded the number of solar panels we own three times over those eight years, as we have incrementally transitioned our household energy sources away from fossil fuels to solar power. We currently own a solar array that stands alone in our yard, solar panels on our roof, and a portion of a solar farm in Freeport. Thus I think I have a pretty wide of experience with residential solar in Maine from which to offer these suggestions. My motivation is to further encourage residential solar adoption in the CMP portion of Maine (I suspect incentives and disincentives are similar in the rest of Maine). Much greater residential solar adoption is a crucial component of necessary efforts to reduce greenhouse gas emissions.

The two interrelated elements of current residential solar policy I recommend be changed are:

**1. Eliminate the “use it or lose it” component of residential solar power banking.**

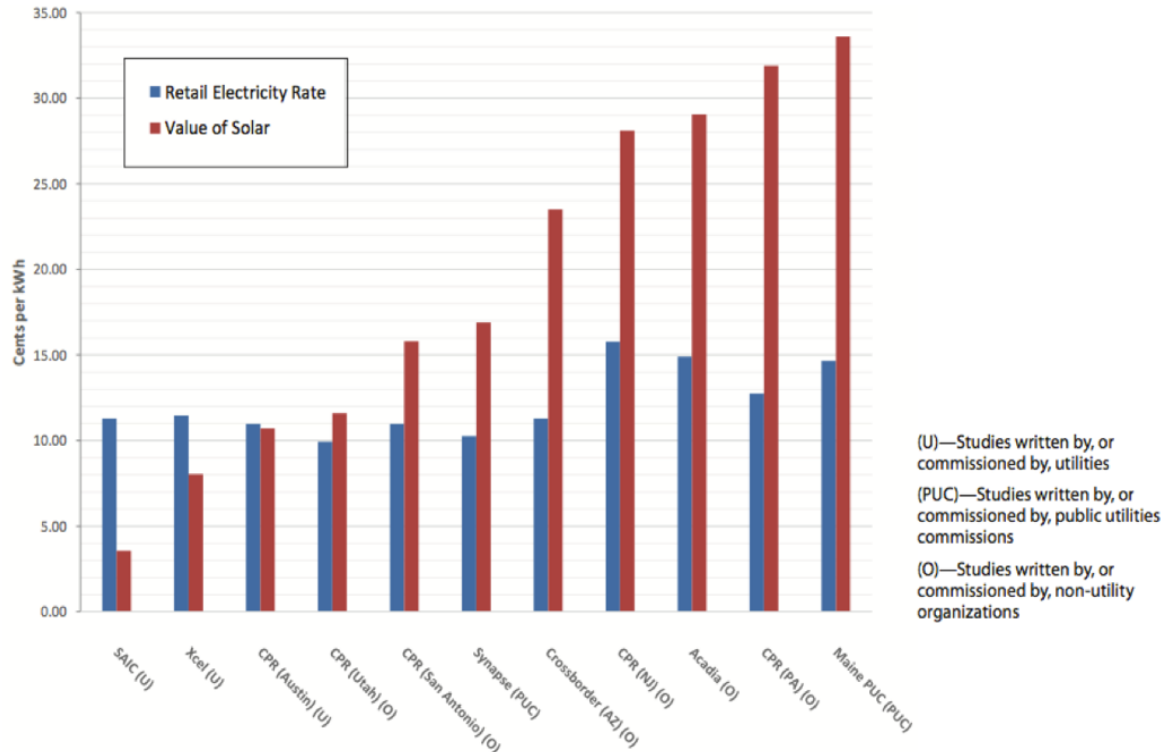
Currently, if a residential customer does not use banked solar generation credits within 13 months of generating them, the customer loses them and they are absorbed by CMP. Why is this a bad policy for encouraging solar expansion in Maine? Solar investors currently walk a tight-rope trying to cover their expanding solar needs, without producing too much and giving it away (which I, many other residential solar investors, have done over recent years). Both residential solar production and energy needs vary seasonally and yearly. Yearly variation is caused by weather (ie greater electricity needs one year compared to previous). But also importantly, residential solar energy needs can and should increase over the years. For example, if a household replaces a fossil fuel-powered heating system or a water heater or a stove or a vehicle with ones that are electric/solar-powered (as we hope and need Mainer to do), solar energy needs grow annually. But the bank solar credits to support this solar transition go away. Indeed, a customer reviewing her/his expanding banked solar credits on the monthly report from CMP would be incentivized to switch household components from fossil fuels to solar. But this switch to solar/electric power takes time (and money), and customers should be allowed ample time to convert.

**2. Allow residential solar producers with options for their banked solar credits.**

The proposed bill would allow customers to donate unused solar credits. This seems to be a fine option (although it strikes me that arranging the donation through CMP would be a bit more complicated than ideal; many of us continue to be nervous about CMP electricity accounting, given our experience with them in Fall 2017 and Winter 2017-8). But there should be other (and I think simpler) options: Customers should be allowed to continue to bank their solar credits beyond 13 months for later use (as explained in Item 1 above, for future expanded electricity needs). Customers should also have the option of receiving payment from CMP for their excess contributions to the electricity grid, as the law stipulates in other

states. How much customers should be paid is an open question. I will note that a Maine PUC analysis a few years ago found that those solar contributions to the grid were twice as valuable as the electricity rate (please see figure below). A fair current market value for unused solar credits can be determined.

**Figure 2: Average Retail Residential Electricity Rates Compared to the Values of Solar in 11 Cost-Benefit Analyses.<sup>3</sup>**



Source of figure: <http://mediamatters.org/research/2015/09/14/myths-and-facts-about-net-metering-for-solar-en/205519>

Lastly, you might ask: if my household has incrementally and thoroughly shifted our appliances and vehicles from fossil fuels to solar-electric energy over the years, while working under the current policies with CMP, the policies seem to have worked. I would suggest I am an outlier: a person heavily devoted to reducing fossil fuel use. I would respectfully submit I am not a typical Maine resident. They need fewer disincentives and more incentives to make the same clean energy transition. Please keep in mind that, owing to the growing climate crisis, the fate of the planet rests on renewable-energy decisions that you and your constituents make in the near future. Thank you for considering these suggestions.