Berkshire Photovoltaic Services

SMART PROGRAM - CONSUMER DISCLOSURE - January 2024

Only one of our Massachusetts installations have participated in the SMART program since it started in November 2018. At present, the 2023 SMART program was not viable for any residential projects using the ownership model. There are virtually no incentives or a negative incentive. Some larger commercial PV systems may be helped by the SMART program still. Contact us and stay tuned as the State Dept of Energy resources is now seeking comments on a new SMART program . Here are the reasons why the SMART incentive was not a good deal for residences:

Incentive is too low: The residential incentive paid by the utility program will range from $0.02 per kilowatt hour (kWh) last year to zero this year. At best $200.00 per year for a 10 kW PV system which is typically the largest size allowed for most residences. Not enough to cover the transaction costs and special metering equipment required to participate. According to the SMART Expansion program residential incentive calculator now in effect, the incentive is $0.00.

Irrevocable Utility Ownership of Attributes
The SMART program (Solar MAssachusetts Renewable Target) conveys irrevocable ownership of all solar electricity attributes to the host utility for residential, a full ten-year term, and for commercial, a full twenty-year term. There is no opting out of this requirement or the program during the Term. The Massachusetts Department of Energy Resources (DOER) SMART Consumer Disclosure Form (attached) refers to the separation of attributes from electrons; it states in part:
"…*while, you cannot claim that you are using the solar power generated by the facility, your purchase of a solar array does support solar development in Massachusetts and increase the amount of solar energy consumed by all electric ratepayers in the Commonwealth*."

The SMART program incentive is really a transaction. The PV system owner must convey the clean energy goodness (attributes) to the utility which in turns converts them into a Class 1 Renewable Energy Certificate or REC.
DOER's choice of phrasing is unfortunate because the utilities may use attributes conveyed through the SMART Program as a Renewable Energy Certificate or REC and other "*Certificates*" in venues outside of the Massachusetts Renewable Portfolio Standard and out of state.

The **Solar Massachusetts Renewable Target ("SMART") Renewable Energy Certificate Assignment and Aggregation Form Agreement ("Agreement")** is attached. We call this the SMART REC Agreement for short. The DOER Consumer Disclosure form does not warn the consumer about conditions the utility imposes under the SMART REC Agreement, participants must sign.
Regarding attributes it states:
The utility is "*authorized to include and represent my (Solar Tariff Generation Unit) or STGU in the New England Power Pool Generation Information System ("NEEPOOL-GIS") and/or any U.S. state, domestic, or foreign registry for Environmental Attributes (collectively "Other Registries").*

That means your utility can (and often does) sell the RECs from a SMART Participant in other more lucrative REC markets. That means the ***solar*** in the *solar* energy is not consumed by any Commonwealth of Massachusetts electric ratepayers. This may be quibbling but seems to us to ignore the intent of legislation since 1997 on the Massachusetts Renewable Portfolio Standard.

We also warn our customers that the following clauses in the SMART REC Agreement are too open ended a risk to take on for a ten, or a twenty, year, irrevocable obligation.

Actual "Agreement "language is in italics:
The utility "*may need my assistance to (*a.) *monitor and record …* (b.) "*perform any and all acts necessary"* for the utility *"to participate in NEEPOOL /GIS and/or "Other Registries".*
"*I shall take all commercially reasonable means necessary, and pay any costs or fees associated with such actions to cooperate in a timely manner with" (* the Utility*)*
"*…to register the STGU in NEEPOOL – GIS and/or Other Registries for environmental attributes in order to qualify for any program(s) and/or otherwise receive and use the Certificates."*

Thoughtful people might ask: what other programs and registries and certificates? Are these attributes worth more than the utility is paying? We point*[1] them to the strange language in the SMART Tariff[2]on page 12, Section 17.2 - approved by the Department of Public Utilities. This is a section wherein Force Majeure events like tornados and earthquakes are cited and it concludes with this statement:
"*Notwithstanding the foregoing, a Force Majeure Event shall not be based on Owner's ability to sell market products* [meaning attributes and/or certificates] *at a price greater than the rates applicable to the STGU or the Company's* [meaning the Utility] *ability to purchase market products at prices below the applicable rates.*
In other words, consumers should expect that SMART attributes are worth more than they are getting from the utility.

You may regret selling solar attributes irrevocably and cheaply to the utility. No one should ever sign an Agreement which allows for collection from you of extra transaction costs and fees to sell RECs or derivatives in "Other registries", foreign and domestic.

The state has a disclosure obligation to consumers on the actions by Massachusetts utilities to use SMART Class 1 RECs or environmental attributes in "other registries" from the same kWh of solar electricity SMART participants' generate. There should be periodic public reports on the price a utility received, and the venue used to sell attributes derived from SMART participants' PV capacity.

SMART METERING
The terms and conditions of the SMART program also require us to install metering infrastructure for special utility owned meters which will register the solar kWh tally from the PV system on your

[1] BPVS submitted detailed written comments to the DPU during the hearings for the SMART program which among many issues discussed the attribute derivative strategy. Please contact us for copies or go to the web based DPU file room and look up the proceedings of Docket 17-140.
https://eeaonline.eea.state.ma.us/DPU/Fileroom/dockets/bynumber

[2] The actual SMART Program tariff is not attached; its lengthy and arcane. Please contact us or your utility if you would like a copy.

premises. During the tariff process the utilities sought and seemed to indicate they would eventually need to have internet access for interconnected solar participants.

If you choose to participate in any of the SMART battery or separate utility Solar + Storage programs internet access is required so the utility can control the discharge and charge of the battery set. In effect your PV system and Energy Storage System, ESS or becomes part of the Internet of Things the utility or its program sponsors and managers will control.

SMART Commercial and Utility Size PV Systems
In order to gain eligibility for net metering, larger systems must participate in the SMART program. If you have a project over 10-25 kW in size please contact us for guidance on the SMART Incentive which is sometimes more generous for non-residential rate classes.

Conclusion
Prior to SMART, customers always had the opportunity to opt out of selling attributes or RECs. Many chose not to participate in selling attributes at all for environmental authenticity reasons. Some sold them for a year or two to improve the payback on their solar PV investment. Some of our customers whose installations came in under earlier much more generous SREC programs, continue to sell them.

The utilities and the state officials know that the SMART program has hurt the residential solar market in Massachusetts. BPVS has advocated for a sensible, real-time production incentive for small accounts based on today's prices because it is, after all, today's energy. The utilities should not have a monopoly on revenue grade metering of privately owned solar. It should be tallied by the state only and require at minimum: monthly readings from sites. With transparent data to all, particularly academics, regional patterns of production tracked, a better strategy for re-panelizing solar arrays will emerge. A function of the metrics needed to aver the worst effects of climate change is to identify the most productive installations in the state.

This is still a good time to invest in solar however because of the 30% Federal Tax incentive which will not sunset for ten years.