

Michael Judge  
Department of Energy Resources  
100 Cambridge Street Suite 1020  
Boston, MA 02114

August 22, 2013

Dear Mr. Judge,

Thank you for the opportunity to submit these comments on the SRECS II program design detailed at the August 12, 2013 Stakeholders meeting. The Patrick administration and DOER should be pleased the original SRECS program has met its goals and the citizens of the Commonwealth should be glad for their efforts in leading the nation with prudent solar incentive policies.

These comments address the specific questions presented by Dr. Breger at the end of his presentation on proposed policy changes for SRECS II.

**Are incentive levels sufficient for project development ?**

Possibly, if:

- The auction floor price for SRECS II and its annual clearing is guaranteed.
- The Federal 30% Tax Credit is renewed for Residential and Business owners.
- SREC Factors are not adjusted widely down or more than once yearly.

No, since:

- Prospects are wary of the SRECS/RECS market; it is not bankable
- Commonwealth Solar Rebate for small systems ends.  
*Residential and non-profit owners cannot capture equal tax benefits businesses can.  
PV owners who choose to retain generation attributes cannot use the SRECS incentive.*
- Program is too complicated to explain properly  
*Citizens are suspicious of the solar policy enterprise, it seems unduly complex on purpose.  
The curious have seen a confusing range of presentations by government officials and industry.*
- SRECS factor adjustments, schedule of declines adds to cascading risks.
- Increased costs for equipment and labor.  
*The economies of scale in manufacture are ready for higher efficiency cells, but global 'over scale' and cheaply made products led to the low prices of today. Projects will see increased costs based on market demand for reliability of equipment, durability of services and PV workforce professionalism during the SRECS II term.*

**Suggested Solutions:**

- Calter Bill passes firming the SREC floor or regulation firms the floor.
- Regulation requires incentive change upward in early 2017 if 30% federal tax credit declines or disappears.
- Residential owners and those with moderate means or home value receive a higher incentive. Non Profits receive a higher incentive.
- A Non- SREC incentive is created as an option. ( see Endnote)

**Are there market sectors omitted in the non-managed, non-competitive group ?**

- Community Shared Renewable PV projects meeting residential criteria, but in the aggregate exceeding 500 kW at a site, should be exempt from the lower SREC factor for landfill/ brownfield, ground-mount and competitive bid solicitation sectors.

### **What Guidelines should DOER follow to modify SREC Factors?**

- Is the SREC factor complication really necessary with a firm floor and declining ACP ?
- Could DOER simply note the potential need for the emergency regulation process as market or tax policy crises erupt?
- If the factor adjustment lever is allowed to DOER, isn't it inevitable that we'll see multiple factors for sub sectors than those posited? Despite the department's sincere assurance of discretion and limited application of throttle and brakes to the market there'll be multiple hands on the steering wheel.
- If the factor is part of policy, please limit adjustments to once yearly.

### **SRECS Forward Minting**

Forward minting of SRECS as a mechanism to encourage direct ownership of PV in the residential sector is a laudable new policy initiative. Extending this incentive to Community Shared PV projects meeting residential criteria recognizes the pent up demand among ratepayers with non - viable sites or limited means. Coupled to innovative, solar specific finance options for the ownership model this aspect of the SRECS II program will have a significant economic multiplier effect within the state. It will earn almost as much ratepayer respect for Massachusetts solar subsidies as the non - SREC production incentive detailed in the endnotes of these comments. There are cautions to consider:

- Any discussion of this new policy must anticipate the backlash from residential participants in Commonwealth Solar and earlier programs reliant on relatively modest rebates and from those who in recent years locked into long term residential lease/ppa contracts with 3<sup>rd</sup> party ownership (TPO) providers. Their regret for acting too soon will transfer into a marketplace perception that incentives do get more attractive over time.
- The discount of 10 year production, DOER may establish for this offer, presents a dilemma. The best solution is to set the SREC forward minted value/factor at the same price for the duration of the SRECS II program or until the 30 % federal tax credit expires, whichever comes first. No matter which year a participant receives a commercial operation date a consistent price will help prevent a land rush the first year(s) of the program.
- Based on a balance of the SRECS II ACP rate , the SRECS II auction floor rate and in recognition of the SRECS I recent clearing auction, a price of \$270.00 after fees is appropriate to spur development in this sector and mollify criticism from SRECS I residential participants and ratepayers.
- It is not clear that DOER will act as the buyer of these SRECS although that is recommended to relieve the consumer of complicated arbitrated offers from the private sector,. To ensure a level playing field DOER should mandate a set price and maximum commission fee if the aggregator community is allowed to handle this forward transaction. The option to owners for a three year shelf life is unnecessary with a set price.
- Prescribed, model contract language vetted against Massachusetts residential contractor and consumer protection law must be included in all development and installation contracts or separate loan agreements which offer financing on, or assignment of , the future payment for forward minted SRECS.

- Performance estimation and independent metering verification as currently required by the Commonwealth Solar Program should be detailed in prescribed contract language and a DOER eligibility agreement. DOER should consider language assuring a pre-emptive waiver of penalties for the end of or reduced production performance of the resource, over the opt in term resulting from natural catastrophes or acts of God.
- DOER should prepare a disclosure statement in an eligibility agreement that fully describes the incentive and legal requirements of the owner, any finance agent, and the installer/developer; require initialization of it having been read.

**. Forward Minting Incentive and 3<sup>rd</sup> Party Ownership Companies**

TPO providers in the residential sector are in the business of equipment leasing and/or acting as a virtual utility. They should not be beneficiaries of SREC forward minting. The Commonwealth Solar program has a defensible sound policy in this regard. TPO residential sites were not eligible for moderate home value or moderate income adders.. The substantial incentive, SRECS II, forward minting represents, dictates program requirements of all parties involved without exceptions.

Arguments that the TPO provider could or would reduce the lease or ppa terms for the residential account owner to partially or fully value the receipt of forward minted SRECS remain to be seen. This argument could be equally made by TPO companies in the commercial, institutional, and government sectors for large systems to benefit their electricity off takers. A consistent policy on this premise would allow forward minting across all sectors.

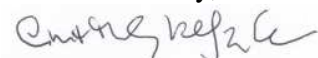
Relaxing the credit score threshold for potential customers to convince DOER of the efficacy of their inclusion for SRECS II, forward minting may be offered. The state should keep in mind the TPO will be the guarantor of production not the homeowner so it's the sustainable business plan and creditworthiness of the TPO to examine or that of unknown successor assignees of these Massachusetts resident's lease contracts. TPO residential installations in Massachusetts have gained significant market share as a result of the vacuum in conventional, regulated, financing tools for solar consumers. The SRECS Forward minting incentive at a set, bankable value will reduce the TPO's finance hegemony.

Some TPO companies in the residential field offer an ownership option. Confining the SRECS II, forward minting incentive to only small system owners of the PV resource is not a restraint of their competitiveness in the market for these customers.

DOER lack of clarity thus far on this very new policy initiative for an SRECS II forward minting incentive should be remedied quickly. The consequences of weak regulation , of letting the industry use forward minting at will( basically creating another speculative market within the SRECS II residential market) assures more confusion among PV consumers and damage to the trust of all ratepayers.

Thank you for considering my comments in policy decisions, I look forward to a technical session on consultant's reports.

Sincerely,



Christopher Derby Kilfoyle  
BPVS

**Via email to :DOER.SREC@state.ma.us**

**Endnote: Non SREC Incentive**

The Renewable Portfolio Standard (RPS) allows purchase by suppliers and utilities of not just attribute certificates (RECS and SRECS) but actual electricity from renewable sources to meet compliance obligations. Normally, residential, net metered, PV site accounts export such electricity to the grid daily, others on weekends. True tallying of actual decremented kilowatt hours (kWh) is already practiced by one utility in their metering regimen. These whole solar kilowatt hours (whole meaning with their attributes intact) are then sold to other accounts by the utility and the PV account is credited at near the retail rate. For PV sites who choose not to separate their attributes from the electricity, the Non – SREC incentive, adds the source integrity to the retail rate in the net metering credit.

For example, a 5 kW system produces 5,755 solar kWh per year, two of every five kWh generated is exported through and measured by the utility revenue meter. The utility reads this meter every month and in a years time the account has exported 2,303kWh. In a direct transaction with the utility on their billing account, that 2,303 kWh is valued at \$0.41 per kWh, ( \$0.125 adjusted retail value + \$0.285 say for clean energy value or attributes) amounting to a \$944.23 credit per year. That's \$656.36 more than the normal net metering credit they would receive under current regulations. The utility can apply the 2,303 solar kWh to their compliance obligation. Choosing this whole solar kWh (Non-SREC) incentive for exports means the PV account holder cannot sell the attributes of the 3,452 solar kWh they used behind the meter. Their return on that is simply the value of deferred purchase from the grid.

Their incentive is much more modest than had they sold the attributes of their full solar production as SRECS but that is better than nothing offered under the proposed SREC II plan and end of the Commonwealth Solar rebate. In fact the credit for these exported whole solar kWh s could be higher at start and decline relative to the RPS Alternative Compliance Payment (ACP) schedule. Despite the 3,452 solar kWh the account owner keeps for their 'personal' renewable compliance obligation, society as whole is served from the emissions deferral of all their solar kWh production.

The PV owner realizes authentic use of whole solar kWhs in house and a monetary bonus for contributing whole solar kWhs to the grid. To those who think this ethical diligence is merely a semantic scruple over the word 'attributes', read the strictures of the Federal Trade Commissions Green Guidelines issued in December 2012.

<http://www.ftc.gov/os/2012/10/greenguides.pdf>

Institutions, organic farms, other businesses and individuals take seriously their environmental footprint from electricity usage.

This non-SREC incentive should be extended as an option to all PV owner accounts and particularly those left behind by the Solar Carve-out in 2010. It would encourage daylight hour electricity conservation on these accounts. The net metering recovery surcharge could be modified for these accounts. Certainly the regulation should permit such customers to opt for cash payments from the utility for excess credits and disallow PV capacity greater than 125% of historic load on the account. This incentive is simpler to explain because it is more natural than separation of attributes from electrons. There would be no aggregator or third party verification needed. An opt in term for the life of the PV generation resource rather than the ten year SREC term would encourage its adoption.