



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

August 26, 2013

Dwayne Breger
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100 Cambridge Street, Suite 1020
Boston, MA 02114

Re: Comments on DOER's SREC2 proposed policy design

Dear Mr. Breger:

Thank you for your ongoing work to implement the second phase of the Massachusetts Solar Carve-Out. DOER's commitment to a collaborative public process is evident, and we are confident that it will yield an excellent public policy outcome. Your guidance of this process, like your guidance of the Solar Carve-Out in general, has been methodical, creative, transparent, and wise. We especially appreciate how responsive DOER has been to earlier comments. We believe that the current proposal under consideration is a good one, though as you will see bellow, we do want to offer some suggestions for what we feel would be important course corrections.

We are grateful for the opportunity to provide these comments.

- 1) We continue to believe that the use of a multiplier is problematic. We urge DOER to simplify the SREC factor assignments by defining only three groups, in recognition of the inherent difficulty of setting these levels "right," and the challenging politics of dividing and calibrating different market segments over time. We do have comments on the economics proposed by DOER, and request a protocol for sharing those in confidence.**

We are not enamored of the SREC factor concept used as a multiplier. We understand that DOER is trying to level the playing field so that certain more expensive projects that are nevertheless desirable can have access to the market. We also understand that a truly competitive but also diverse marketplace demands some mechanism like this; DOER is working to tighten project economics over time, to deliver the most bang for ratepayer buck, which we support, and we understand that some mechanism like this must be used to avoid a bad choice between diversity and efficiency.

The main problem with using this multiplier mechanism is that it administratively determines the economic relationships between project types, which is antithetical to, and therefore compromising of,

the market-based rationale for using an SREC program in the first place. As DOER knows well, the value of a tradable credit incentive mechanism is that the policy uses market forces – specifically, competition – to discover the most efficient, leanest incentive level. As currently proposed, the multiplier mechanism abandons this policy driver for much of the solar market – for everything other than the managed market. As we understand the proposal, we believe that the basic concepts in the managed market can force incentive price-discovery through competition, but that the un-managed market segments will not respond. Through the Solar Credit Clearinghouse Auction (SCCA) mechanism and the ACP schedule, DOER is limiting volatility and variability in the value of an SREC itself, and forcing the competitive dynamics into the SREC factor variable, rather than the SREC value variable. And because the un-managed project types will have fixed SREC factors, there is no competitive element in those segments. We aren't saying definitively that that's a problem, though it certainly represents a tradeoff that must be carefully considered.

Our more important observation about that is that we are concerned about the potential for a growing gap over time between the economics of projects in the managed market versus the un-managed market. It seems likely that the clearing SREC factor in the managed market will drop over time, as lower cost and a maturing competitive environment are expressed in the SREC factor, *not* in SREC price. Of course, one reason that SREC prices themselves will likely fall is that the SCCA and ACP schedules decline over time. However, under the design proposed by DOER, additional SREC price declines that could be brought about through competition will be shifted to the SREC factor, not price. As a result, that price-discovering power of a tradable credit policy will affect only the managed market, not the un-managed market. In our view, this likely leads to a scenario in which rich economics for the un-managed market creates a boom in those segments, crowding out the managed market. (We address this crowding-out potential below.)

In order to address the issue, DOER proposes to give itself the ability to adjust the SREC factors for changing market dynamics over time. We think it is very likely that this will prove to be an extremely administratively and politically challenging process. DOER has proposed a three-month runway for an impending SREC factor adjustment. Three months is only enough time if projects can reach some grandfathering threshold quite early in the project development process; otherwise, DOER is asking developers to incur significant development expenses without certainty about the incentive rules that will apply to them. But if that grandfathering threshold is early, then DOER is creating an incentive for projects to rush to that threshold when it might not otherwise be sensible to do so. Alternatively, DOER could provide a longer runway for any SREC factor change, but that seems certain to lead to scenarios that are very similar to the process we have just gone through and continue to go through around SREC1 qualifications, introducing ambiguity, judgment, and heavy administrative burden for DOER. Either way, we believe that including a simple mechanism for SREC factor adjustment in the regulation will inevitably lead to risk and inefficiency, and distortion in the project development ecosystem.

Furthermore, DOER will face the very difficult and unpleasant task of refereeing between different interests that will be making arguments about the comparative economics of their projects. Our feeling that this is a game that DOER should not play is underscored by our examination of the segmentation that DOER has proposed on slide 12 of its August 12th presentation. We understand that this grid reflects the work of several consultants with whom DOER contracted to investigate the economics of various types of projects, but to the extent that it is intended to reflect a "level playing field," we are confident that it does not. Rather, it appears to us to be a mixture of an attempt to use multipliers to level the playing field and to set policy priorities, and we think it ends up doing neither particularly well.

Given all of this, we think that DOER would be wise to consider a slightly simpler approach. We think there should be three segments: projects under 25 kW, the managed market, and everything else. The sub-25 kW market would have one SREC factor, the “everything else” market would have another, and the managed market would be competitively bid as proposed. For everything over 25 kW, DOER should make a simple choice: do we want to provide extra encouragement to this market segment relative to the large-scale stand-alone ground-mounts that are in the managed market, or do we not? If the answer is yes, it’s in the “everything else” segment. If no, it goes in the managed market segment.

We believe that this simplification would be beneficial in three ways. One, it would mitigate the extent to which we are looking at a future of conflict over SREC factors – it would reduce potential conflict, and in so doing make the difficult task of cleanly adjusting the SREC factors in the future somewhat easier. Two, it would jettison complexity that isn’t getting us anywhere, because we believe that the differences between SREC factors of 0.9, 0.8, and 0.7 are less than the margin of error of DOER’s consultants’ study. Three, it would introduce added ratepayer protection, by leaving more of the determination of where to put solar to the competitive marketplace. Whether DOER adopts this proposal or not, we do think that additional specifications about the process for SREC factor adjustment are needed.

We have examined DOER’s proposed SCCA curve, ACP curve, and SREC factors. We have comments on those, but we do not want to share them here because of competitive sensitivities. We seek guidance from DOER on how to provide that feedback.

2) We believe that DOER should do more to ensure that larger-scale projects will be able to move forward under SREC2.

DOER clearly believes that the project mix under SREC1 is not optimal, and has introduced new policy elements to try to shift the project mix more in the direction of what DOER believes is in the public interest. We believe that Massachusetts benefits from all project types that prevailed under SREC1, and should continue to encourage all project types. We acknowledge that the prevalence of larger-scale projects is somewhat different from what DOER had in mind in 2010, and we agree that it is important to make sure that there is room in the market on an ongoing basis for all project types. But we also want to emphasize here that the MA solar goals have been met and exceeded *because of* the types of projects that DOER is seeking to manage more tightly, not in spite of them, and there is valuable momentum in that market sector that should not be wasted. MA set out to support solar because it’s clean, local, and carbon-free, and has been extremely successful in doing so. With every 2 MW system that comes online, Massachusetts is less and less at the end of the energy pipeline.

DOER now proposes to boost the incentive available to smaller projects relative to larger projects in order to level the playing field, which is sensible and in the public interest. But we think this is enough; it is not wise for DOER to take the additional further step of giving such preferential access to the market for the un-managed project types that those seeking to develop larger projects must simply keep their fingers crossed that there will be room for them. This is not merely constructive for one segment; it is *destructive* for the other. We understand that DOER has the perspective that there is plenty of room for the managed market, but it may not always be so. The story of solar in the US in recent years – the *good* story, not just in Massachusetts, but in many other state markets, and in the country as a whole – is one of exponential growth when a market “works,” and DOER has clearly proposed a system in which the un-managed market, if it grows quickly, could put a stop to a thriving market segment in the

Commonwealth. That possibility in regulation is enough to cool both development and project investment unhelpfully.

Our strong recommendation is that DOER provide forward visibility to all market segments. If the goal is to ensure that all project types continue to be represented, and if DOER does not want to constrain larger ground-mounts *per se*, but rather wants to make sure that there is room in the market for other types, then DOER should take steps to ensure that the pendulum does not swing all the way the other way. The best way to do this would be to define an amount of capacity that will be available for the managed market on an ongoing basis. If the un-managed segments grow enough that this amount of capacity is not available for the managed market, then access to SREC qualifications would become limited similarly for all market segments.

At a minimum, we suggest that DOER always provide forward visibility into capacity available in the managed market for two to three years. DOER should estimate the capacity that it thinks would be available in each solicitation for the next two to three years if it simply made the “leftovers” available, but then commit to making that capacity available no matter what happens in the other segments. Furthermore, DOER should commit to a minimum level of managed market capacity, below which some regulation review proceeding would be triggered, to explore options for protecting this market segment from complete erosion. Defining a two to three year forward view would thus provide certainty with respect to market size for the entire project development cycle for larger-scale projects, and would also provide enough lead time at the policy level to adjust if un-managed project segments are crowding out the managed market.

Admittedly, this would introduce some additional potential for over or under supply to the extent that DOER’s estimate of growth in the un-managed market is wrong, but we are not too troubled by that – we believe that it is reasonable for DOER to place some governors on SREC supply, but this is still an SREC market, and it does have some ability to calibrate for changes to supply and demand.

3) Though we understand and support the policy objective for which it is offered, we urge reconsideration of the forward minting mechanism. Furthermore, if we in fact do understand the policy objective for which it is offered, we believe it should apply only to host-owners.

We believe that DOER should jettison the forward minting concept, and replace it with another mechanism that allows host-owners to withdraw from the SREC market. We understand the policy objective for which forward minting is being proposed. The SREC market is challenging enough for those of us who have the incentives and resources to dedicate careful study and operational resources to it. It is hopeless for a non-professional owner. We appreciate and support the policy objective, but we don’t think DOER has proposed the right tool, for three reasons. One, despite DOER’s intention to calibrate demand so that it accounts for forward SREC minting, we strongly suspect that forward minting will have a distorting effect on the SREC market. Two, we are also skeptical of DOER’s ability to properly calibrate the economic effect of forward minting on system economics, which results from both the timing of SREC production itself, and the fact that early SREC vintages will very likely be more valuable than later vintages. Three, we aren’t even sure that DOER’s proposed solution will sufficiently mitigate the information problem that host-owners face. True, the system owner would only have to sell SRECs in the first vintage year, and the hopeless problem faced by the non-professional owner is more that they have to develop a forward view on SREC prices in order to evaluate their own investment decision than that they must engage with the SREC market at all. But in Massachusetts as elsewhere, SREC prices

have changed fast. With a year or more between the timing of an investment decision and a sale of forward minted SRECs, there is still ample room for price swings, misunderstandings, and misinformation.

We understand the appeal to DOER of using the forward minting concept; first and foremost, no additional funding source is required. But we strongly believe that the program will function more smoothly if DOER can adhere to a simple rule: projects should either be in or out of the SREC market. We understand that most alternative mechanisms would require a funding source, but we nevertheless urge DOER to jettison forward minting in favor of something like a short-term fixed PBI with an entity such as the Clean Energy Center.

We also want to express our view that whatever mechanism DOER ultimately uses – be it forward minting or some other tool – it should be limited to systems that are owned by their hosts. We return to the policy objective for which we understand forward minting to be offered: to enable host-ownership as one option among several by relieving non-professionals of the obligation to develop a forward view of SREC prices. Of course, forward minting also solves another policy problem: the uncertain future value of SRECs itself. We know that DOER well appreciates the importance of this problem; for years we have argued that a fixed PBI or SRECs with long-term contracting would have some fundamental advantages over the kind of SREC system we have been using and are preparing to use again for SREC2. Furthermore, we believe that DOER understands those arguments as well as we do, and only after considering the relative merits of pursuing each of these two main courses – stay with the basic model of SREC1 or try to switch to a PBI or long-term contract model – has it decided that it makes the most sense to move forward under an adjusted SREC1 model.

For that reason, we understand the forward minting concept to be offered to try to address *only* the more limited “non-professional owner forward view” problem, and not the more substantial “price-certainty/liquidity” problem. As a result, we believe that forward minting is only properly applied to host-owned systems. This is not to impugn at all the value of third-party ownership, which is a critical tool for dramatically expanding the solar marketplace to many, many people who could not participate in the solar economy if only host-ownership were possible.

We also think it’s relevant to point out something here from our experience in the California market, which is that many public entities – and in particular schools – own their own systems there, but that’s not the case in Massachusetts. It’s tempting to believe that public entities always opt for third-party ownership because of the tax implications, but the California experience belies that: public entities in California often leave the tax attributes on the table in favor of long-term ownership. The difference is that California uses a fixed PBI, and Massachusetts uses SRECs; public entities want to own their own systems, but are unwilling to deal with the uncertainty of future SREC value. We therefore encourage DOER to consider extending the availability of whatever mechanism it ultimately uses to address the issue for which forward minting is proposed to public entities that want the ability to pursue host-ownership rather than third-party ownership.

4) More clarity is needed in a couple of areas, as is consideration of other market segments that may warrant exclusion from the managed market.

We support the comments of SEIA and NECEC with respect to the ways in which more clarity is needed in DOER’s proposal. In particular, we urge DOER to provide additional details about the non-price

criteria that will be used in the managed market, and about the on-site load differentiator between different SREC factor buckets. We also encourage DOER to provide a draft of the solicitation documents for the managed market soon. Our experience with similar programs in other states has taught us valuable lessons about how to structure such a program that we are eager to share; among them that it can be difficult to set the right bar for entry in order to ensure credible bidding, and that the process of taking stakeholder input and refining the program rules often takes longer than expected.

Finally, we suggest that DOER may want to take additional stakeholder input about whether or not there are additional types of projects that may warrant exclusion from the managed market. In particular, community net metering projects, projects on previously disturbed sites that may have few potential uses but that are not brownfields, and projects in municipal utility territories all seem worthy of additional thought and consideration.

Thank you again for the opportunity to provide these comments. We look forward to continuing to work with you towards a successful, timely program launch.

Sincerely,

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