



COMMENTS POST-400 MW POLICY

March 20, 2013

Introduction

The Solar Energy Industries Association (SEIA) welcomes the opportunity to submit comments on the solar carve out expansion to the Department of Energy Resources (DOER).¹ SEIA appreciates the leadership Massachusetts has demonstrated in expanding renewable generation and attracting investment to the Commonwealth. The results are material and evident. The Massachusetts solar carve-out has attracted a wide variety of customers, investors, and developers. SEIA supports the current framework and recommends modest refinements for future expansion, to better accommodate a maturing market.

1) The current state of MA solar

Massachusetts has over 220 MW of installed distributed solar generation capacity, which positioned it seventh among all states at the end of 2012.² There are over 200 solar companies now located in the Commonwealth. These companies include residential and commercial solar installation firms, as well as companies that manufacture the equipment used to create solar modules and other components of a solar generation facility. This has meant thousands of good new local jobs, direct and indirect, seasonal and permanent.

The average installed cost of solar generation facilities has fallen precipitously nationwide, just as the Massachusetts solar market is reaching a scale that is attracting significant investment,

¹ The Solar Energy Industries Association (SEIA) is the national trade association of the United States solar industry, encompassing all solar technologies, including photovoltaics (PV), concentrating solar power, solar heating and cooling, and other technologies. Through advocacy and education, SEIA and its 1,000 member companies work to make solar energy a significant energy source by expanding markets, removing market barriers, strengthening the industry, and educating the public on the benefits of solar energy. SEIA's membership includes many companies with installations, offices and facilities in Massachusetts.

² **Solar Market Insight Report, March 14, 2013. GreentechMedia and SEIA. Executive summary available at <http://www.seia.org/research-resources/us-solar-market-insight-2012-year-review>**

ensuring the best pricing and products for our citizens. The Commonwealth chose the best possible time to invest in the support of new solar generation and a local solar industry, because in this period of transition to a new, lower cost environment, the national solar industry is in the process of sinking deep roots in the states with viable markets.

This success story starts with the Green Communities Act. By committing to local solar, the administration and the legislature have put our communities on a path to a more broadly sustainable energy future. Electricity source diversity will mitigate the risks of future source and cost impacts. The unique benefits of distributed generation are helping to lower costs, and modernize and harden the Commonwealth's aging grid. And we are all working together to meet our climate goal of a 25% reduction in greenhouse gasses by 2020.

It is in this context that SEIA applauds the Administration's initiative to expand on the current program goal of 400 MW, to continue to invest in a local solar industry and capture its near-term and long-term benefits. These comments are offered in support of that objective.

2) Roadmap to 1600 MW

SEIA recommends a program expansion that is predictable and sustainable over the long-term, and that is well-designed to reach a target installed capacity goal at the lowest possible cost to ratepayers. SEIA recommends a goal that allows for modest year-over-year increases in a new and growing market. An expansion to 1600 MW over five years would send a strong signal that Massachusetts will continue to invest in local solar as the industry transitions to cost-competitiveness in the long term.

The current solar carve-out has been very successful. Investment has been robust, especially over the past 12-18 months, and all market segments have been well-represented. The 2012 and 2013 SREC markets are oversupplied and prices are modest, but prices have not "crashed" as they did when other northeast solar markets entered their first oversupply periods, because

of the innovative safeguards that DOER put in place to keep SREC supply and demand in relative balance. We expect a return to balance and potentially undersupply within the next few years, and an associated temporary SREC price increase, which is generally the reason why the rate of investment is high despite a low spot market for SRECs. In other words, the current program appears effective at attracting investment while also minimizing public subsidy.

For that reason, SEIA supports the simplest and most straightforward approach to going beyond 400 MW: replicate the existing program, but with a lower auction price. Because the supply cap at 400 MW is itself a feature of the existing program that provides assurance against a long-term market oversupply, it is important that the new program be kept separate from the existing 400 MW program. As long as it is done as a second, distinct program, SEIA believes that the simplicity, and potential for a seamless transition to a second phase of the current solar carve-out framework is powerfully attractive, and supports it.³

However, it is also SEIA's position that the SREC market would function better with more liquidity and with mechanisms for long-term contracting for SREC off-take. Accordingly, SEIA recommends that DOER consider layering several new mechanisms on top of the existing framework in a second solar carve-out:

- A) Work with the distribution companies to create and implement a long-term contracting program for all or part of the solar carve-out.

³ Assuming the existing program is essentially replicated in a second phase, SEIA would propose one modest adjustment to the Minimum Standard formula. We would suggest that DOER consider moving from a generation-based (MWh) formula to one based on installed capacity (MW). We believe such a metric would be a better "predictor" of the SREC-creating potential of qualified solar generation facilities going into the next Annual Period. Further, a capacity-based formula would address the seasonality of installations and potential distortions associated with some generation only being operational for a small fraction of the current Annual Period (and thus contributing relatively few MWh's of generation).

There is widespread acknowledgement that ratepayer and taxpayer dollars are more efficiently delivered as an incentive when risk in the level of incentive is minimized at the outset, as it is when the system owner has a long-term contract for SREC off-take. SEIA believes that the cost-of-capital for money used to finance a merchant SREC stream is at least double or triple that used to finance a long-term contract for SRECs, even in Massachusetts, where the innovative program design has done well to reduce SREC risk compared to other northeast SREC markets. In short, we can do more with less when SRECs move from sellers to buyers under a long-term contract.

We urge the Administration and the Legislature to work with stakeholders to find a long-term contracting framework that is acceptable to all parties. As an add-on to the second phase of the solar carve-out, it would make sense for the utilities to conduct quarterly solicitations for a minimum of ten-year contracts (ideally longer) for their portion of the solar carve-out SREC obligation. SEIA believes it is critical that those solicitations be transparent and competitive, in order to ensure that ratepayers are benefiting from the efficiencies of long-term contracting to the greatest extent possible. And we also understand that the utilities need to be assured that they will be able to fully recover their costs incurred through purchases under a long-term contract, just as if they had purchased SRECs on the open market. SEIA urges the administration to work with the legislature to instruct the utilities to meet their portion of the second phase solar-carve out demand through long term contracts, and to provide regulatory assurance that the utilities will recover their prudently-incurred costs under such a program. We further recommend that policy-makers consider the EDC SREC finance programs in New Jersey as a model for how a utility long-term contracting program can be layered on top of a standard SREC market.

SEIA also calls DOER's attention to another option that we believe would maximize the efficiency of the RPS model: move the RPS obligation to the delivery portion of the bill, thus removing the competitive suppliers from the system entirely, and satisfy the entire obligation through regular long-term contract solicitations, the costs of which are recovered through a

non-bypassable charge. We believe that this would be the best way to deliver the desired level of solar capacity at the lowest possible cost to ratepayers. Under this scenario, the solar carve-out framework is not needed at all.

SEIA's position at this time is that if a critical mass of stakeholders – DOER, key legislators, the Attorney General, and the utilities – find this to be an attractive option, or at least a potentially meritorious one, it is worthy of serious consideration. By the same token, we recognize that it represents a significant shift, and would not urge this path if it appears uncertain and time-consuming compared to the simpler model of moving to a second phase of the existing solar carve-out.

B) Consider a production based incentive (PBI) for small systems

One challenge for small system owners is that it can be harder for them to participate in SREC markets as efficiently as owners of larger systems can, since SREC buyers prefer to transact in larger lot sizes. Additionally, small systems do not enjoy the same economies of scale as larger ground mounted systems and may find it difficult to compete with larger systems in a commodity-driven SREC market. To address this liquidity problem for small systems, SEIA recommends that DOER and the Clean Energy Center (CEC) consider implementing a PBI that is available to residential and small commercial systems. Small system owners would be able to elect to take a regular PBI payment from the CEC – at some level lower than the SREC auction price – in exchange for their SRECs. CEC can then monetize those SRECs on the open market. There is some risk in this position for the CEC, but if structured properly, a system like this would stand to simplify the process for small system owners and enable the CEC to fully recover its costs, but without adversely impacting the normal functioning of the SREC market.

C) Implement an auction support mechanism through the distribution companies.

SEIA recognizes that the auction does not need to clear for the solar-carve out design to be working properly. DOER has designed the system to be robust in the face of an un-cleared auction: in theory, if the auction does not clear, demand increases sharply, soaking up excess supply and quickly returning the market to balance or undersupply within the extended life of SRECs that are returned to their owners. But that said, the system is working best and most simply when the auction does clear, and it is hard to imagine that an un-cleared auction will not introduce turbulence in the SREC market. And by extension, SEIA believes that the threat of an un-cleared auction and the associated time-delay in monetizing SRECs is one key reason why the Massachusetts SREC market suffers from a lack of liquidity.

Accordingly, SEIA recommends that the second phase of the solar carve-out include an auction support mechanism, under which each distribution company would be required to purchase a share of any unsold SRECs at the end of an auction, in an amount corresponding to its share of the total Massachusetts supply obligation. This mechanism would increase confidence in the auction, and would have a significant positive impact on the availability and efficiency of financing in the solar market.

3) Conclusion

SEIA thanks DOER for its ongoing leadership, and for this opportunity to comment on the path forward from the 401st MW. The Patrick Administration's unwavering commitment to clean, local, renewable energy is paying off in the form of local jobs and economic development, electricity supply diversity, new investment in the Commonwealth, more citizen engagement in our energy choices, and reduced greenhouse gas emissions. We look forward to participating with all stakeholders in this process, to laying out a visionary path forward in the public interest, and to continuing to work in Massachusetts.

