PRIME SOLUTIONS, INC.
ENERGY ENGINEERING

Via email to dwayne.breger@state.ma.us and DOER.SREC@state.ma.us

August 26, 2013

Dwayne Breger, Ph.D.
Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Re: SREC-II Policy Design Comments

Dear Mr. Breger:

Prime Solutions, Inc. ("PSI"), in conjunction with Seaboard Solar LLC ("Seaboard"), respectfully submits the following comments with regard to Phase II of the Solar Carve-Out Program as outlined by the Department of Energy Resources ("DOER") at the second Solar Stakeholder meeting on August 12, 2013. PSI and Seaboard appreciate DOER's efforts to develop a new SREC program to continue the expansion of the successful last phase. However, we have some concerns that certain design elements will lead to unintended consequences, which will not be supportive of the healthy, sustainable growth of the solar PV market in Massachusetts ("MA").

We strongly believe that, unless DOER devises a program where high-quality, serious investors making the required investments of dollars and time into the MA market are enabled to achieve their expected investment-return goals in a transparent, standardized, and fully disclosed basis, the market will only be available to smaller-scale projects and to the largest of solar PV developers who are able to underbid and essentially buy the market.

The following are our comments and observations about the proposed SREC II Program.

1. In spite of the best efforts of the DOER, we believe that the process by which the SREC I program ended was flawed and is now unjustly penalizing large-scale, ground-mount projects, many of which have been in process of development and implementation for over a year. As stakeholders in the MA solar PV market, we have been acutely aware of the interconnection-queue problems over that period of time, and for many of us, this issue has impeded, and significantly lengthened the time of, the interconnection process. This queue blockage issue has been coupled during the same timeframe with the high levels of uncertainty about changes in both the SREC and net metering programs. We realize that the utilities are now making substantial headway in cleaning up the interconnection-queue problem; however, that process only began to clarify in June, so the backlog issue did have a major impact on the efficiency with

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which projects got through the queue over the last year. In fact, many of us were faced with a lack of knowledge as to where we were in the queue since the information was unavailable until early summer.

The real failing of the transition, however, is that there was no broadly disseminated public notice to all stakeholders ahead of the June 7th, 2013 meeting that interconnection service agreements ("ISAs") had to be signed by end of day on June 7th, 2013 in order to be able to participate in the SREC I Program as the emergency transition. **There was no due process, and the window of opportunity given to developers was essentially seven (7) hours.**

Clearly, many of us were unaware of the critical importance of that meeting and did not attend, believing that we would receive the meeting summary on Monday as to next steps. If we had known its importance, we would have clearly been there. We, as well as many other stakeholders, were taken by surprise by the resultant directive at the June 7th meeting that ISAs had to be signed by the end of the same day, June 7th, to qualify for participation in the SREC I Program. The confusion was fully evidenced by the chaos which ensured once the meeting ended, and developers were rushing around trying to get ISAs signed (at least for those who were there physically and could do so). Stories abound about the madhouse at National Grid, for example, as developers desperately showed up at headquarters and tried to get ISAs signed in time. We did not hear about the drop-dead date until the end of the day, and by then it was too late.

There were two projects in particular, where the initial ISA for both projects was sent to National Grid on March 7, 2013, and after repeated efforts to contact National Grid in order to execute the ISA, we missed the June 7th deadline and did not get ISAs signed until June 13th, 2013, 6 days after the deadline. This was completely out of our control, though if we had known about the June 7th deadline, we would have been in Boston physically, making sure the ISAs were signed.

2. In order to ensure that it makes sense to proceed with the substantial investments necessary just to get to the point of a signed ISA, a developer will need to invest approximately $75,000/MW. In addition, building credible financial models, which are based on detailed financial and operating assumptions including availability of incentives, is critical to attract high-quality capital. Over the last year, many of our projects have been developed in the Massachusetts market based on the availability of certain levels of incentives, and strategic decisions were made to proceed and invest in project development, with the understanding that projects met certain investor return-on-investment and other financial criteria.

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We at PSI and Seaboard make a point to focus internally on developing financing options early in the process in all markets in which we participate to drive toward shovel-ready projects as soon as an ISA is signed. As a result, up until recent proposed changes in the SREC program and the lack of visibility on the net metering program going forward, we have had financing in place for all of our MA projects, representing 45.5 MWs of solar PV, all of which are in National Grid territory. However, because of proposed changes in the SREC Program, financing access is now substantially less certain. We have little to no visibility on financeability, even though we will be ready to build later this year. Not only will we be faced with considerably lower incentives (even non-existent if we do not in fact get awards during the competitive bidding process arising from the proposed SREC II program), but are also faced with a potential double hit, with the Net Metering Program caps being reached rapidly.

There is now dramatically increased uncertainty and higher financial risk associated with proceeding with projects which have just missed inclusion in the SREC I program but in development for extended periods of time and in all cases, where significant investments have been made across the board. There will be substantial time lost, with little visibility on: 1) the size of any competitive bidding program for all of the projects which did not qualify (we assume it will be a sizeable group of projects); 2) the timing of the program and how long it will take to be organized and awarded; and 3) whether a developer will actually win an award, which is a very high-risk situation for those projects which have already spent substantial sums based on expected SREC price certainty.

3. PSI and Seaboard acknowledge that DOER has a right to institute certain policies supporting state social goals which shift solar PV development toward certain segments over others within a market-driven approach. However, it is troubling that DOER has chosen the SREC program to control solar PV development, and by extension, land development, in the state. It is our opinion that the SREC program is not the way in which to accomplish that objective and that it is, in fact, unnecessary.

   The stated approach of the SREC II program will, in effect, push down on municipalities certain requirements that will constrain local solar PV procurement. This is actually counter-intuitive since many communities may want to be as "green" as possible and are looking for creative ways to develop solar PV for municipal as well as community use through solar aggregation, virtual net metering and other incentive mechanisms. In contrast, other communities on their own are limiting solar PV growth and putting in place significant zoning and permitting restrictions. This is happening as we speak, and we have experienced the development of both trends over the last year. For example, Rowe, MA now has in place a special permit requirement for solar PV projects greater than 250 kW in size; New Salem, MA permitting requirements state that a solar PV project cannot be over 1 MW or exceed 2 acres; and

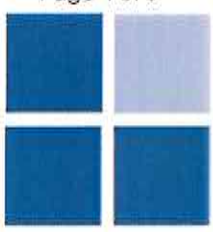
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Brimfield, MA has no MW limit per se but has a 10-acre limit in place, which effectively limits solar PV development to 2 MWs.

In addition, by disincentivizing cost-efficient, large-scale solar PV development, the state has unduly penalized commercial, industrial and municipal offtakers' ability to obtain best-in-class competitive electricity rates. As an example, because many of our projects' offtake agreements with municipalities were negotiated when both the SREC and net metering programs were available, we will now be faced with going back to those offtakers to renegotiate the price, upwards of 40% higher, at which we will sell back electricity to the offtaker. This is clearly unintended consequences of the transition, but consequences nonetheless.

As a result, we do not believe the SREC II Program should be used to control the market in the way proposed. If land-development control is the objective being sought by DOER, then the net metering/virtual net metering program is the more logical place in our estimation to put in effect policies that control the size of projects, as well as the requirements for a minimum 67% on-site load. The system-size restrictions put in place last year on the private side of the market have already effectively capped large-scale, ground-mount solar PV installations designed to export energy; on the other hand, the public side should continue to be encouraged through innovative virtual net metering mechanisms such as community solar aggregation, which should certainly be in the hands of municipalities as to how, when and in what form they want to develop renewable energy. The net metering program is close to being filled, so it is excellent timing for revisiting the market mechanisms for the program and how it can support social policies as reflected in the underpinnings of the proposed SREC II Program.

4. We are puzzled by the weighting factors, how they were assigned and why they are even necessary. In fact, all segments could have the same weighting factor (1), and DOER could still effectively create tiers through other financial mechanisms. As mentioned previously, the state is pushing down to municipalities, for example, requirements that are already being controlled locally and will continue to be going forward. In our estimation, DOER has created a very complex program with these multiple weighting factors, which will be difficult to manage over time and which will create market dislocations that will have a negative effect on municipalities' ability to develop renewable-energy projects in a manner that reflects the wishes of those localities. Instead of artificially creating weighting factors by market segment, we recommend you consider setting caps by market segment, including what you are referring to as the Managed Growth Sector, to reduce market uncertainty and financial risk for all segments.



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It should also be noted that the state's goal of 1.6 GWs of solar by 2020 is substantial in a small state with constrained utility grids. This goal may be difficult to reach without the robust involvement of large-scale, ground-mount solar PV installations appropriately placed across the state at available points of interconnection.

We believe that, if the state is adopting policies to direct development in certain segments rather than others, it needs to institute mechanisms of directing solar PV development at points of interconnection which are available to reduce the wasted time and efforts put in by developers to locate viable interconnection points. Again, this is a means of effectively limiting growth of large projects. We understand that this entails working closely with the utilities, but many other states are already taking this approach successfully, and the state of Massachusetts should consider it as a means of prioritizing types and sizes of projects in different areas of the state.

5. We are very concerned about the vagueness of the competitive bidding aspect of the program. Without high bars to inclusion in the bidding process (e.g., site control, permits in place, and other factors showing a credible, vetted and financeable project), we believe that the state runs the risk, as experienced in California in the early years of solar PV development and in Connecticut in the first year of the ZREC Program, that many developers will bid low and then be unable to finance the project, extending out the timeframe by which projects are ultimately awarded. In addition, there is also the danger of developers having sufficient market power to "buy" into the market at low prices. For example, the large segment of the CT ZREC Program (250 kW to 1 MW) had winning bids that went down as low as $78/REC to $118.88/REC. Actual bids went as high as $297/REC. While clearly this was advantageous to the state of Connecticut, it is also obvious that the low-bid prices from one of the largest solar PV developers in the world were well below average for market bids.

   The key point is that, with the law of unintended consequences, the state of Massachusetts might get a reduced number of qualified bidders because of a "Catch 22" in market design: in order to have qualified bidders, developers need to invest substantial sums up-front, up to $250,000 per project (site control, option payments, engineering costs, zoning and permitting, etc. leading up to a signed ISA), to identify and develop financeable, shovel-ready projects. This process generally takes a minimum of 1 year; however, by definition, developers will not want or be able to take on the financial risk that they will not win an award during the competitive bidding process, which might not occur until over two years from the beginning of project-development cycle. That is indeed a high risk to take.

   It is also concerning how loose the program design is for competitively bid projects: twice a year, with

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unknown amounts driven essentially by what is left over from developments happening in other segments. In our estimation, this is particularly unfair for those projects already well along in project development, which invested substantial sums in the Massachusetts market based on existing policies at the time.

We are concerned about delays for real projects with financing in place and which are shovel-ready. All of our projects fall into that category, and yet, we have zero visibility on the level and timing of incentives. We feel we will be at the mercy potentially of developers who underbid and cannot obtain financing, which will further delay the process. A mechanism to correct this potential problem is non-existent and even if it did exist, would take a long time to work through the bidding and award process.

In addition, for projects already vetted and with signed ISAs which did not get into the SREC I Program, out of the gate they will be penalized by at least 30% because of the .7 SREC adjustment factor. In essence, even if our projects, or others in like circumstances, were to be awarded SRECs under a competitive bid, they will be 30% more expensive than what the original models projected and what financing sources expected.

Recommendations

- The SREC II Program is flawed and unjustly punitive for those projects which have been under development for the last year and where significant resources have already been spent. We urge DOER to reconsider the transition process and to allow those projects with signed ISAs by December 31st, 2013 be given certainty on SREC incentive levels and not have to wait until the first competitive bid sometime in the first quarter of 2014. We understand, in theory, the reasoning behind the cut-off date, but the complexity and range of the type of projects in the market today preclude such a simple solution. There should be adopted a "graduated" approach to allow large-scale projects with exportable power, which were encouraged by the state under a variety of policies in place and are far along the development cycle, to recoup sunk costs and to make projects originally financed financeable again. At a minimum, DOER should provide projects during this interim period with SRECs at the adjusted SREC factor of .7 (even though we believe the market design to be ill-conceived in general).

- The SREC II Program should not be a tool used to control land development in the state. The net metering program is a more appropriate mechanism for that purpose. The SREC program should be market-driven, and we believe the weighting factors are not designed to attract the best, highest-quality developers and financing sources to sustain healthy market growth. It will be a

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complex program to administer, and there are ways to manage solar PV growth without having to resort to the level of complexity reflected in the program.

We believe other mechanisms already put in place over the last year will alleviate some of the concerns about solar PV development on greenfields and agricultural lands and that various municipalities around the state are already taking activist stands to do so. In addition, putting caps in place for each program and alleviating the competitive bidding program will go a long way to stabilizing and rationalizing that segment of the market. As it is, it is fraught with major problems, unless DOER is essentially looking to reduce to almost nothing the large-scale, ground mount part of the market with below 67% on-site peak load. Although we do not consider this to be a sound policy, it is all well and good if the state takes this new approach for projects just starting or not yet in development; however, for those projects well on the way to project implementation, the new program unfairly penalizes those developers who have invested significant sums, time and market-development effort to develop and implement projects in a financially sound manner.

- Municipalities should have the right to choose what they develop within their boundaries. We do not feel that it is in DOER's place to force certain policies on them if, in fact, they want to be "green" communities. We also believe that the approach unjustly penalizes large-scale solar PV development for commercial and industrial users who may not have enough land or an appropriate rooftop and will need to seek other arrangements, such as building an array that supports its own use as well as provide significant electricity to other consumers in the surrounding area. The new program would not lend itself to these types of arrangements.

- The competitive bidding process should be eliminated and replaced with a program cap. It is simply too vague and will potentially result in speculative bidding, requirement for significant up-front costs to identify and develop shovel-ready projects but a significant lack of visibility for investors, and a variety of timing problems. The biannual nature of it, the suggested SREC Factor, and other aspects of the program as currently constituted will prove untenable, expensive and unsupportable by quality investors.

We thank you for this opportunity to share with you our perspectives on the proposed SREC II Program. We look forward to continuing to be a fully engaged, committed stakeholder in this program-development process as it moves forward through the rules-making period.

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Best Regards,

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