



January 29, 2014

Delivered via e-mail to DOER.SREC@state.ma.us

Mark Sylvia, Commissioner  
Department of Energy Resources  
100 Cambridge Street, Suite 1020  
Boston, Massachusetts 02114

**RE: Draft SREC-II regulations**

Dear Commissioner Sylvia,

Please accept the following in response to the Department of Energy Resources ("DOER") proposed revisions to 225 CMR 14.00, published in the Massachusetts Register on January 17, 2014. Boston Community Capital (BCC) appreciates the opportunity to provide input on these revisions. First and foremost, however, we would like to thank the DOER's Renewables Division staff for their dedication and commitment to ensuring the transition to the SREC II program happens as quickly and smoothly as possible.

**Charles Clark**  
Chair of the Board

**Elyse D Cherry**  
Chief Executive Officer  
Boston Community Capital

**DeWitt Jones**  
President  
BCC Solar Energy Advantage

**Michelle Volpe**  
President  
BCC Loan Fund

**Affiliates**  
Boston Community Loan Fund  
Boston Community Venture Fund  
Boston Community Managed Assets  
Solar Energy Advantage  
NSP Residential LLC  
Aura Mortgage Advisors LLC

BCC is a community development financial institution whose mission is to build healthy communities where low-income people live and work. BCC's interest in the SREC II program stems from the work of one of our affiliates, BCC Solar Energy Advantage ("SEA"). SEA is a third party solar developer and one of the largest solar providers for low income communities in the country. SEA has installed more than 12,000 panels, which serve 1,873 affordable housing units and generate 2.7 million kWhs of solar electricity annually. With its next round of solar projects currently under construction, SEA's project portfolio is expanding to more than 4 MWs of solar across 30 Massachusetts projects.

BCC's focus on developing solar projects in low income communities means that, from a policy perspective, we are most concerned with issues of equity and access. We raised similar issues in our August 26, 2013 letter to DOER as part of the stakeholder process to develop these regulations and we appreciate that many of our suggestions were adopted. However, we still have concerns about the capacity of the SREC II program to meet the needs of the communities we serve. Based on our analysis, the incentives proposed in SREC II are unlikely to provide adequate funding to allow low income communities and non-profit institutions to continue to access solar and its benefits. Our comments focus on this issue and we suggest several ways in which DOER could address this segment of the market. We also request further clarification on a few aspects of the regulations.

**SREC II could do more to offset the market realities of serving non-profits and affordable housing communities so that those electricity users are not excluded from the benefits of solar electricity.**

Even though the cost of solar panels and other components have decreased and are likely to decrease further, the reality is that developing projects on affordable housing and non-profit rooftops is more expensive than it is for many comparably sized systems. To ensure that access to solar energy is available for all communities, BCC believes that SREC II should better incentivize affordable housing and non-profit projects and account for the financing structures required to build them.

A number of factors contribute to the higher cost of these solar projects. For one, affordable housing and non-profit projects typically cannot take advantage of federal tax incentives. Many also do not have the capacity to pay for a solar installation and are unable to borrow funds to cover the cost. As a result, they often depend on third party financing. Third party financing, however, is complex and the transaction costs are necessarily higher. Further increasing transaction costs are the often-complicated ownership and financing structures of affordable housing developments. As an example, on one of BCC's recent projects, the affordable housing development had ten different funding entities involved in approving solar project documents. Such involved document review processes take time and cost money.

Many affordable housing developments also have site related factors that increase the costs of installation. For example, many of BCC's solar projects are on multi-building affordable housing developments. The solar systems on these properties generate close to 100% of the development's common area electricity load, thereby lowering and fixing electricity costs. The overall system sizes range from 34 kW to 391 kW, but those kW's are sometimes spread across multiple buildings and multiple interconnections. Installation across multiple roofs means that costs for these projects are higher than for a comparable, single system of the same size. Importantly, BCC seeks to maximize the benefits of these systems to project hosts, and nearly all of our individual systems are larger than 25 kW.

As we noted in our August 26, 2013 comments, most affordable housing and non-profit projects are unlikely to be economically viable under the proposed SREC II regulations. This is readily illustrated by BCC's most recent round of solar projects, which include eight rooftop solar installations ranging in size from 36 kW to 115 kW, located at six different multifamily affordable housing developments and two non-profits. At current prices, and prudently assuming an SREC II value at the floor price, none of these projects would be viable under SREC II.

Given the unavoidably higher costs of these projects, and in keeping with the Commonwealth's goal of encouraging a diversity of solar installations, we recommend that DOER provide the greatest incentive possible under SREC II for projects serving non-profits and affordable housing developments. Many of the projects that BCC develops for these entities would fall into Market Sector B and receive an SREC factor of 0.9. As such, BCC suggests that DOER modify Market Sector A to allow these projects to qualify for an SREC factor of 1.

Towards that end, BCC proposes the following modifications:

- Increasing the maximum size of Generation Units eligible under Market Sector A from 25 kW to 50kW; and

- Expanding the definition of Community Shared Solar Generation Unit under 225 CMR 14.02 in the following manner:

Community Shared Solar Generation Unit. (a) A solar photovoltaic Generation Unit that provides net metering credits to two or more utility accounts, whose owners have a formal ownership stake in the Generation Unit or the entity that owns the Generation Unit, and for which the net metering credits provided to each account do not exceed a value in excess of the equivalent of 30 MWh of generation on an annual basis; (b) A solar photovoltaic Generation Unit that provides 100% of its net metering credits to one or more utility accounts owned by (i) a not-for-profit organization whose purposes are among those listed in Section 501(c)(3) of the Internal Revenue Code, and who is incorporated under state law as a not-for-profit corporation or (ii) low or moderate income housing, as defined in M.G.L. ch.40 §20.<sup>1</sup>

By expanding Market Sector A to include non-profit and affordable housing projects that would otherwise be in Market Sector B, the additional SREC revenue that would be realized is equivalent to cutting the installed cost of the system by \$0.22 per watt. This narrows the gap between project's costs and the revenue required to pay for those costs. The remaining gap will need to be covered by additional funds, further decreases in project costs and/or efforts to minimize transaction costs. Of course, this doesn't guarantee that these types of projects will be built, but increasing the SREC factor gives them a greater chance of being developed and challenges developers like BCC to find new ways to drive down costs.

**A solar financing program needs to be responsive to the financial barriers facing the non-profit and residential sectors, and contemplate financing options beyond conventional or subsidized loan products.**

BCC supports the creation of a financing program, as outlined in 225 CMR 14.05(9)(p), to enhance the availability of ownership financing options for Solar Carve-Out II Renewable Generation Units. In particular, we applaud DOER's commitment to expand access to solar for the residential and non-profit sectors. Lack of access to upfront capital is a key barrier for many non-profits and low to moderate income homeowners interested in directly accessing the benefits of solar-powered electricity. Related and equally important barriers, however, are the inability to borrow capital and need for the solar installation to yield current and ongoing savings. To be successful, a financing program should be responsive to all of these barriers. BCC looks forward to providing input to DOER and the Massachusetts Clean Energy Center (CEC) as they determine the best way to do this. Ahead of that process, BCC would like to make a couple of requests.

First, while direct ownership of solar is a laudable goal for the Commonwealth to pursue, direct ownership does not necessarily overcome the barriers faced by those currently unable to take advantage of existing solar incentive programs. Some non-profits are unable to finance their own solar projects because regulatory constraints prevent them from borrowing money for projects that are not

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<sup>1</sup> M.G.L. c. 40, § 20 defines low or moderate income housing to include "any housing subsidized by the federal or state government under any program to assist the construction of low or moderate income housing as defined in the applicable federal or state statute, whether built or operated by any public agency or any nonprofit or limited dividend organization."

directly related to their mission. For non-profits that are able to finance solar projects, direct ownership of revenue-generating solar systems could raise complicated issues in relation to their tax exempt status. Even for-profit affordable housing developments face strict revenue restrictions potentially limiting their ability to directly own solar projects, as well as restrictions on their ability to borrow additional funds.

Potential tax issues aside, non-profit owned solar systems are likely to have higher costs because non-profits are unable to take advantage of federal tax incentives. Finally, while many non-profits are interested in locating renewable energy projects on their properties, few possess the resources, time or expertise to lead their development and maintenance.

In these ways, the third party ownership model can be an attractive alternative to direct ownership. As executed by BCC, for example, non-profits pay nothing upfront, benefit from electricity rates that are guaranteed to remain significantly below utility rates, and can rely on the third party project owner to manage the installation and maintenance of the system over the term of the Power Purchase Agreement. However, as noted above, under the SREC II program many of these projects will have a funding gap. Therefore, BCC asks that any financing program aimed at expanding access to solar for non-profit and affordable housing developments facilitate both direct and third party ownership.

Second, BCC asks DOER to pay particular attention to the needs of prospective residential solar customers who, for one reason or another, are unable to self-finance, borrow funds or take advantage of a third party or leasing program. This includes homeowners who cannot currently borrow funds because of limited equity, first mortgage restrictions, or poor credit. To be responsive to this constituency, a successful upfront financing program will have to look beyond conventional or subsidized loan products.

BCC is itself in the process of developing alternative approaches to overcoming the upfront capital gap for solar systems. We look forward to sharing our experience with DOER and CEC as the financing program is developed.

**The annual capacity blocks for the Managed Growth Sector ought to be reexamined and the annual compliance obligation increased, in light of the pace of project development in 2013 and the anticipated expiration of the Investment Tax Credit (ITC) in 2016.**

BCC understands and supports DOER's efforts to restrain growth in the Managed Growth Sector so as to ensure there is sufficient capacity in the SREC II program for a number of projects across a variety of sectors. BCC believes, however, that DOER is too conservative in its approach and risks undermining the ability to reach the 1600 MW target by 2020.

Specifically, the schedule for continued development of solar projects under SREC II raises the specter of severe contraction in the Commonwealth's solar market. SREC II's proposed annual capacity block limits for Compliance Years (CY) 2014 and 2015 are 26 MWs and 80 MWs, respectively. These annual targets are low when compared to the total number of MWs installed just last year. The numbers are not yet final, but it's already clear that at least 200 MWs of solar was installed in 2013. To have such robust development followed by dramatically lower, prescribed growth limits, contraction in the industry seems all but inevitable.

Granted, development in Market Sectors A, B, C is not limited. But the total number of MWs installed in these Sectors, at least in the initial years of the program, may not be substantial. What's more, the compliance obligation for the SREC II program is what ultimately sets the demand for SRECs and will send a signal to developers about when and how much to build. In the absence of a healthy compliance obligation in the initial years of the program, prices for SRECs could fall, slowing development as investors lose confidence in the market. In addition, with the federal ITC is set to expire in 2016. This is expected to have a negative impact on the solar industry as a whole and could lead to further contraction.

From BCC's perspective, the potential for contraction is significant and should be minimized. To ensure the continued existence of a healthy solar industry, and the ability to meet Governor Patrick's 1600 MW target, we recommend that DOER increase the annual capacity blocks for the Managed Growth Sector through at least CY 2016 and adjust the capacity obligation accordingly.

**A guideline detailing what constitutes "critical infrastructure" under the definition for Emergency Power Generation Unit, is needed to provide clarity on which types of solar applications would be eligible under this category.**

BCC applauds DOER's forward thinking in deciding to include Emergency Power Generation Units in Market Sector A. However, the reference to "critical infrastructure" in the definition for Emergency Power Generation Units in 225 CMR 14.02 is vague. It's not clear which type of solar applications would fall into this category. BCC therefore requests that DOER issue a guideline that details the criteria for what constitutes "critical infrastructure."

Since the solar industry is in the early stages of figuring out how best to use solar to provide resilient power, we suggest that DOER adopt criteria that encourage innovation and embrace a wide range of potential solar resiliency applications. The criteria for "critical infrastructure" should qualify back-up power applications, installed at fixed locations, to charge communication equipment (e.g., cell phones and laptops) and power critical loads (e.g., refrigerators and heating equipment); renewable energy powered electric vehicle charging infrastructure; and inverters that allow solar panels to continue generating electricity when the grid goes down. These applications, along with many others, provide emergency power to what many would consider critical infrastructure. They also increase resiliency and will improve the ability of communities to withstand and recover from extreme weather events and natural disasters.

**The list of eligible projects for Market Sector B would benefit from clarification.**

As drafted, BCC reads the list of eligible projects for Market Sector B, 225 CMR 14.05 (9)(l)(3)(b), to include any Building Mounted Generation Unit, regardless of size or percent of load behind the meter. BCC requests clarification that our reading of this section

of the regulations is correct. If it is, BCC recommends replacing the comma after “any Building Mounted Generation Unit” with a semi-colon. That way, it is clear that in Market Sector B, Building Mounted Generation Units are entirely separate from ground mounted Generation Units and not subject to the capacity and behind-the-meter load requirements of those systems.

Thank you for your consideration of our comments and suggestions.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "DeWitt Jones", with a stylized flourish at the end.

DeWitt Jones  
Executive Vice President, Boston Community Capital  
President, BCC Solar Energy Advantage, Inc.