



BORREGO SOLAR COMMENTS TO DOER ON NEXT GENERATION SOLAR INCENTIVE PROGRAM

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Submitted via email to DOER.SREC@state.ma.us

Introduction

Borrego Solar Systems appreciates this opportunity to provide input on DOER's development of a successor to the SREC II program. Borrego is one of the most experienced solar power providers in the nation, having been founded in 1980 and installed over 270 MW of ground- and roof-mounted solar projects.

Borrego is committed to Massachusetts. We have one of the longest continuous tenures in the Commonwealth, having entered the market in 2007. For the last several years we have led the Massachusetts market in commercial- and industrial-scale installations, with a total of 131.5 MW installed in the state to date. Borrego specializes in ground-mounted, roof-mounted, and carport projects, and we have successfully partnered with commercial entities, governmental organizations, municipalities, public and private schools and universities, real estate firms, affordable housing developers, general contractors and non-profit organizations to deliver millions of megawatt-hours of solar energy to customers across the Commonwealth. Our company employs nearly 100 full time employees in Massachusetts, and our contracting partners in the Commonwealth employ hundreds more.

Borrego appreciates DOER's efforts to design an SREC II successor program that provides long-term support for solar, and we look forward to working with the DOER, DPU, and stakeholders to ensure the program provides robust, continued support for solar in Massachusetts while continuing to reduce costs for ratepayers.

As detailed below, we have significant concerns with elements of DOER's proposal. Our primary concerns center on DOER's proposal to prohibit projects constructed on property that falls into certain designations from participating in the successor program. Although we understand and support DOER's efforts to encourage responsible project development, we believe the proposed restrictions would severely restrict the development of new ground-mounted solar installation in the Commonwealth. We do not believe DOER intends this outcome, and therefore suggest that DOER significantly modify this aspect of its proposal. In

addition to our comments on these restrictions, we offer additional suggestions for improving other aspects of the program.

Borrego also supports the Department's proposal to encourage electricity storage through the solar carve-out program, and we have submitted comments specific to this proposal under separate cover. Borrego is a member of the Solar Energy Industries Association, Solar Energy Business Association of New England, and the Northeast Clean Energy Council, and supports these organizations' comments on this proposal.

Siting Restrictions

DOER's straw proposal would restrict projects located in specified areas of the state from accessing the successor solar carve-out program. As DOER well knows, distribution-level solar development is currently not viable in Massachusetts without the solar carve-out program. Therefore, although DOER's proposal to exclude projects sited on certain land types from the SREC successor program would not *legally* prohibit solar development in these areas, the DOER's proposal amounts to a *practical* prohibition of solar development on all but a tiny fraction of the available land in the state. It is important for all stakeholders to recognize that the effect of maintaining these proposed exclusions will be that solar projects will not be developed on these excluded lands. Although we understand and empathize with DOER's goal of ensuring that the SREC successor program does not lead to unintended consequences, we feel strongly that the approach DOER has proposed is not the appropriate way to address these concerns.

Our principal concern is that in addition to lands that have traditionally been protected from development (such as lands in permanent conservation, wetlands, and critical habitat), DOER has proposed to exclude projects on almost all other lands in the state that are owned by private individuals, as well as most lands that are managed by local municipalities and other agencies. By DOER's own estimate, the successor program would exclude solar projects developed on 99% of the Commonwealth's land area,¹ effectively prohibiting solar development in all but a small fraction of the Commonwealth. In addition, much—if not all—of the land area that is not restricted is likely unsuitable for solar due to factors such as topography, shading, higher competing uses, previous solar or other development, the unwillingness of some building owners to sign long-term leases, or insurmountable barriers to interconnection.

Although a small amount of development could presumably continue under the new program, the proposed restrictions amount to an almost total ban on new ground-mounted solar development. We understand and appreciate that DOER is reconsidering the breadth of these restrictions based on stakeholder feedback, but we remain concerned that these restrictions will result in a program that does not meet the Department's goals. In addition, the severe narrowing of eligible sites will likely drive up rents on the unrestricted land parcels, making these sites less viable and significantly driving up the cost of the program for developers, customers, and ratepayers.

¹ At a stakeholder meeting held October 22, 2016, DOER stated that its internal assessment of the impact of these restrictions would leave approximately 40,000 - 46,000 acres in the Commonwealth available for solar development. This amounts to less than 1% of the Commonwealth's approximately 5 million acres of land. See <https://www.census.gov/geo/reference/state-area.html>.

Due to the importance of these issues, Borrego and other solar industry stakeholders have been actively participating in the stakeholder process that DOER has convened on this topic. We believe that this stakeholder process is an important opportunity for DOER to receive feedback from stakeholders about these restrictions and to design a more workable approach. However, we are concerned that the current process may not lead to a result that will reflect the needs and perspectives of all the relevant parties. The issues involved in restricting access to the solar carve-out based on land criteria are complicated and controversial, and they merit a careful, deliberative approach.

In particular, we believe that the current stakeholder community is not in agreement about basic issues related to DOER's proposal. For example, there appears to be significant disagreement and a lack of understanding among stakeholders about key aspects of the restricted land use categories and data layers. Areas of confusion and disagreement include:

- How many acres each category of restriction would cover, and where those acres would be located.
- What proportion of the areas not excluded would be available or suitable for solar energy development, and what factors affect whether these areas are viable sites for solar development.
- Whether the categorical restrictions and the GIS layers underlying them are suitable for regulatory use.
 - For example, it appears that many of the land designations and GIS layers were developed without a formal public stakeholder process and without input from landowners, the solar industry, utilities, or other stakeholders. The Commonwealth's web page for one of the largest restricted areas—prime farmland—warns that “[t]his data set is not designed for use as a primary regulatory tool in permitting or siting decisions, but may be used as a reference source.”²
 - In addition, many of these categories and data layers were developed using sampling techniques that paint with too broad a brush to support a simplistic “in-or-out” decision on whether siting a facility within the GIS layer would meet DOER's conservation goals. For example, at least some of the areas encompassed by the land use restrictions are already developed or otherwise not valuable from a conservation or public policy perspective. Similarly, some landfills and brownfields are located in areas that would be restricted under DOER's proposal. We do not believe DOER intends to impose a blanket prohibition on solar development in these areas. We also have serious concerns about the accuracy and, consequently, the usefulness of these data layers for the application of a regulatory program.
- Whether and to what extent a conflict exists between the state's renewable energy goals and the state's other conservation goals.
 - For example, robust permitting and exemption processes already exist to resolve apparent conflicts between solar siting and the state's land, wetlands, and species preservation objectives. All large solar projects must successfully navigate these

² <http://www.mass.gov/anf/research-and-tech/it-serv-and-support/application-serv/office-of-geographic-information-massgis/datalayers/soi.html>.

processes before they can be built. State and local agencies, as well as interested stakeholders, have the opportunity to provide input and, if necessary, to impose provisions and requirements to protect the state's conservation interests.

Therefore, projects that have been granted and are in compliance with all required permits and exemptions are, by definition, not violating the state's conservation objectives. Allowing these projects to participate in the solar carve-out program would therefore not lead to any conflict between the state's energy goals and its conservation goals. It is not clear to us why DOER is proposing to second-guess its expert sister agencies' decisions about wetlands, wildlife, etc., by imposing additional restrictions above and beyond those already required by state law.

- Similarly, the fact that state law allows landowners to remove lands from conservation status or state protection through the appropriate legal processes implies that after removal, the state no longer holds any conservation or other interest in those lands. Therefore, allowing solar development on lands that have been legally removed from conservation status would, by definition, not conflict with state conservation goals. We are concerned that DOER is considering overriding these well-established processes with new limitations that will restrict landowners' rights to manage their land.

We believe these questions and concerns merit serious reconsideration of the Department's approach. To be clear: unless these issues are addressed in a workable manner, the future of the non-rooftop component of Massachusetts' flagship solar program could be in serious jeopardy. We know that the Department and the Administration are committed to continuing the state's robust support for the solar industry, and we look forward to continued dialogue on these important issues.

Project Qualification Process

As DOER has recognized, the process for qualifying projects and reserving a position in the solar carve-out program is a critical factor in the success of this type of program. Borrego believes that the current SREC II SQA and net metering ACA processes have worked well, and represent a reasonable balance between the needs of solar developers to secure a position in the program before committing substantial resources to a project with the need to ensure that projects holding reservations are real projects that will ultimately be built. Specifically, Borrego recommends that DOER retain the requirements to provide evidence of an executed Interconnection Service Agreement, evidence of site control, and evidence that all non-ministerial permits have been received before an entity may reserve a position in an incentive block. We also support allowing entities to retain their reservation for 9 months, with the option of extending the reservation if litigation or interconnection delays prevent completion within the 9-month window.

These systems have been proven to be effective in the SREC II and net metering programs, and the developer community, the Department, and the DPU are comfortable with these systems. Moreover, we urge the Department not to lower the requirements for securing a reservation. Whereas the current requirements ensure that the incentive program is being accessed by projects that are real, not hypothetical, lowering the bar further would risk polluting the incentive

program with phantom projects and could crowd out real projects and delay achievement of the Governor's 1,600 MW goal.

Incentive Levels and Adders

Borrego supports the general structure of the proposed incentive levels in DOER's straw proposal. We believe this approach is one that will provide needed certainty to market participants and ratepayers, and will reduce the costs to ratepayers. In addition, Borrego generally supports most of the identified incentive adders for different project types and market segments.³ In particular, the incentive adder for non-net-metered projects is critical to ensuring the continued growth of the non-rooftop market. Many of these larger projects are or will soon be ineligible for net metering credits, and the possibility of receiving utilities' avoided cost rate or the wholesale market price for the last 10-15 years of project life is unlikely to be sufficient to support development of most non-net-metered projects unless the additional adder is included. Without this adder, we believe it is unlikely that non-net-metered projects under 5 MW will be built in Massachusetts.

Block Size and Structure

Borrego is participating in the Department's stakeholder subgroup on block size and design, and will continue to offer our input through that group and through our membership in various groups and associations. In general, we have two key concerns with the current design.

First, the proposed block sizes are too narrow to enable developers to plan ahead for larger projects. For example, the smaller utilities will likely have blocks that are no larger than 15 MW. At this size, each block could be exhausted in a matter of months by just a few large projects. We therefore recommend that DOER increase the size of the blocks so that developers will have some ability to predict with reasonable certainty which block their project will qualify for. Block sizes of 400 MW would provide more certainty and facilitate better planning and execution on the part of developers.

Second, we believe that the proposed 5% incentive reduction levels are too aggressive to support viable development opportunities in the later years of the program. Assuming that the program proceeds at the rate of three blocks every two years (which we understand to be DOER's goal), developers would need to reduce their costs by 15% every two years to be able to continue building in Massachusetts. This rate is approximately 2-3 times faster than industry projections. We therefore recommend that DOER calibrate its proposed incentive reductions to be consistent with the industry's best estimates for achievable cost reductions. We believe a 2.5% incentive reduction target per block would be appropriate and consistent with the cost reductions we are seeing and are expecting to see in the future.

Program Continuity

³ We note, however, that if significant new land use restrictions or requirements (such as those being discussed) are imposed, the incentive levels may need to be adjusted to reflect the added costs these restrictions would impose.

Borrego appreciates DOER's ongoing efforts to provide a smooth transition from the current SREC II program to the successor tariff. Borrego contributed to and supports the solar advocates' proposed approach to extending this program until the new tariff can be implemented, as laid out in these groups' letter dated September 30, 2016.

In addition, we recommend that DOER address end-of-program continuity for the new solar carve-out up front, in the design of the program, rather than adopting emergency regulations later. We recommend that DOER clarify now that projects that exceed the size of the program should be qualified under the last incentive block unless a new program is in place before the end of the program incentive. Outlining a continuity policy at the start will promote market confidence and will avoid the need for emergency regulations, reducing overall costs and market uncertainty.

Comments on SEA's Analysis

We thank DOER for providing the market analysis conducted by SEA to support the Department's development of the SREC II successor program. As a general matter, we believe a seminar to explain this analysis and the economic and financial assumptions underlying DOER's selection of the incentive levels in the straw proposal would be helpful for all stakeholders, and we recommend that DOER conduct such a seminar soon.

We also note the following issues with SEA's analysis, which we believe DOER should take into account as you consider whether the incentive levels you have selected are appropriate.

- First, SEA's analysis assumes a high and increasing wholesale market price beginning in 2020 (see SEA Analysis at 30). Although average wholesale prices as high as 15 or 20 cents per kWh may indeed be possible within the next 10-20 years, it is worth noting that these prices are three to four times the current and historical prices that solar projects can receive. The use of these high expected prices in the out-years could significantly over-estimate the revenues that non-net-metered solar projects will receive over their project life-cycle. We urge DOER to clarify how these projections of out-year project revenue were used in developing the proposed incentive levels, and whether DOER considered any other projections of future wholesale prices.
- Second, SEA's analysis did not take into account the effect that restricting development to a small fraction of the Commonwealth's land area could have on the incentive required to reach the Department's 1,600 MW goal. As noted above, the scarcity of available land for solar development would lead to a seller's market, in which owners of the few parcels of land that are both eligible for development and suitable for projects would demand significantly higher rents, thus driving up the cost of installing solar projects in the Commonwealth. If DOER maintains its proposed land use restrictions in the same or substantially similar form, we recommend that DOER consider and analyze these implications and adjust the straw proposal accordingly.
- Third, SEA's analysis does not factor in the possibility that solar host customers may face new fixed, non-bypassable "monthly minimum reliability contribution" charges that

could be imposed by the DPU in the near future. Imposition of these new charges would very likely affect the project economics of new solar projects.

- Fourth, SEA's analysis explicitly does not consider benefits other than energy, capacity, and avoided REC purchases that solar provides to the grid and to ratepayers (see, e.g., SEA Analysis at viii-ix). Many studies of the value of solar have shown strong, positive, non-monetized grid benefits from solar, and SEA's failure to take into account these benefits likely overstates the ratepayer impact of the program.

Conclusion

We truly appreciate the Department's thoughtfulness and diligence in crafting its straw proposal, and we look forward to working with you and the other stakeholders in the process to improve and implement the next solar carve-out program. Should you have any questions, please contact:

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