

Comments by Safari Energy, LLC on the 9/5/2019 SMART Program 400 MW Review

To the Massachusetts Department of Energy Resources:

Safari Energy appreciates the opportunity to provide comments on the Massachusetts SMART Program 400 MW Review (the “Review”), presented by the Department of Energy Resources (“DOER”) on September 5, 2019. We are encouraged by DOER’s efforts to increase market certainty and to support behind-the-meter solar, and present our comments to address areas of the proposal we believe could be shaped to better support stable and fair development.

About Safari Energy:

Safari Energy, LLC is the solar partner of choice for commercial and industrial customers, real estate owners, public sector organizations and solar developers seeking competitive financial solutions for their projects. Headquartered in New York City, Safari Energy (“Safari”) has helped clients unlock economic value and drive energy savings by developing hundreds of solar energy projects across the country, including more than 40 projects in Massachusetts. With extensive interdisciplinary expertise, Safari supports the growth of distributed energy resources and PPL Corporation’s focus on advancing a sustainable energy future.

1. Advancing Behind-the-Meter Solar through Base Compensation Rate and Adder Updates

As DOER is aware, there is a major disparity between BTM and Standalone Solar development under the SMART Program. As of the August 19, 2019 applications update, only 4% of applied Large STGU capacity was for BTM projects.

Many of the changes to the treatment of BTM systems proposed in the Review will help to bridge this gap. By (1) decreasing the rate at which BTM Base Compensation Rates decline, (2) expanding availability of Alternative On-Bill Credits to BTM STGUs, (3) updating the BTM Value of Solar to better reflect actual compensation, and (4) resetting location-based adders at their initial levels, DOER shows strong support for further BTM development.

2. Recommendation Regarding Treatment of Behind-the-Meter Systems under the Proposed Preferred Interconnection Adder/Subtractor

The proposed Preferred Interconnection Adder has the potential to draw development to grid locations where solar, and solar paired with storage, will provide meaningful and important relief. We commend DOER for recognizing and rewarding the locational benefits of distributed solar. **However, Safari Energy recommends that if DOER chooses to proceed with a preferred interconnection subtractor, it should exempt BTM systems from incurring the penalty.** Our reasons are as follows:

- 1) **The interconnection process already mitigates negative grid effects from distributed solar.**
When customers apply for the SMART Program, they have already undergone the in-depth and

lengthy interconnection screening process, agreed to pay for any necessary upgrades to both customer-owned and utility-owned equipment, and in some cases, downsized their solar systems to meet grid requirements. They have already borne the costs associated with potential grid modifications and upgrades. To further penalize systems would be redundant and prohibitive to development.

- 2) **Behind-the-meter solar systems are designed to serve on-site load and to minimize grid exports.** As the Review recognizes in its BTM Value of Energy proposal, most energy produced by BTM solar systems is used to serve the customer's immediate needs. While the mismatch in solar production and energy consumption profiles ensures that some energy will be exported, this amount is minimal compared to Standalone system exports, with correspondingly minimal grid impact. DOER's proposal that systems over 500 kW be paired with energy storage will further reduce exports.
- 3) **This subtractor would mean that Electric Distribution Company ("EDC") customers must pay into the SMART Program yet may not equally realize its full benefits.** The EDCs recover the costs of the SMART Program by assessing the SMART Factor on all retail delivery service bills. A locational subtractor would require some ratepayers to pay into a program, yet would deprive them of the Program's full array of benefits. Furthermore, they would be less likely than their fellow ratepayers to have access to the utility bill relief that solar provides. All customers that pay the SMART Factor should be equally entitled to recognize the full value of solar energy on their home or business.

To implement the Preferred Interconnection Subtractor, and in particular to apply it to Behind-the-Meter Solar Tariff Generation Units, would be redundant, unnecessary, and unfair to certain customers. We encourage the DOER to take this into consideration when developing its emergency regulation and guidelines to implement the 400 MW Review.

3. Recommendations Regarding Implementation of the Proposed Energy Storage Requirement for Systems Over 500 kW

DOER should be applauded for its efforts to increase implementation of energy storage technology. Such efforts will provide significant value to customers and ratepayers and provide important grid benefits. However, DOER's proposal requiring systems over 500 kW to be paired with energy storage may unfairly penalize projects currently under development, and mid-sized C&I-scale projects where energy storage may not be a strong fit.

- a) **Safari recommends that projects in the interconnection queue before the emergency regulation is promulgated be exempted from this rule.** It is our experience that in Massachusetts, projects over 500 kW (AC) take an average of 6.3 months to receive interconnection approval. Thus, it is reasonable to expect that projects in the early stages of feasibility and contracting as of September 5th, 2019 would not have received interconnection approval by late November 2019. Developers working under the assumptions of the current program structure will be required to materially alter months of contracting, engineering, and

permitting work to adapt to this change unless projects are reasonably grandfathered in.

- b) **The minimum system size requiring paired energy storage should be increased to at least 750 kW (AC).** Multiple obstacles may stand in the way of installing energy storage in conjunction with mid-sized solar systems. Often, C&I customers do not have the space required for a battery container. This is particularly the case in urban areas where DOER is seeking to encourage more solar development. Customers may also be reluctant to install storage for other reasons, including concerns over safety, relatively high prices, or unfamiliarity with the technology. This requirement should at minimum be altered to apply only to systems of at least 750 kW. At this size, solar arrays are best suited to both offset on-site load and to charge energy storage system systems, optimizing project economics and making up in part for financial and other challenges.