



February 2, 2024

Samantha Meserve
Director
Massachusetts Department of Energy Resources
100 Cambridge Street, 9th Floor
Boston, MA 02114

Dear Director Meserve:

Thank you for the opportunity to submit comments in response to the Stakeholder Questions issued by the Department of Energy Resources (“DOER”) on December 21, 2024 in regard to the Solar Massachusetts Renewable Target (SMART) Program (the “SMART Program”).

Klavens Law Group, P.C. (“KLG”) provides corporate, real estate, environmental, and regulatory services and has been deeply involved in solar energy development in Massachusetts. KLG clients include solar energy project developers, investors, and other stakeholders from Massachusetts and around the country who have been and continue to be key players in the growth and development of the flourishing Massachusetts solar energy sector. We have also been involved in redevelopment of brownfields and closed landfills for both solar energy use and other types of commercial development as well as various agrivoltaic or dual-use projects.

We have participated in multiple stakeholder processes throughout the development and implementation of the Green Communities Act and the regulatory proceedings that adopted the Solar Carve-out Programs, the Net Metering Program, and the SMART Program. We appreciate the opportunity to assist DOER as it reflects on the SMART Program structure, incentives, and values in light of the various emission and clean energy goals required by statute or otherwise established by the Healey-Driscoll Administration. We realize that DOER expects to receive numerous, varied comments in response to the questions posed, and so we have confined our comments to those where we believe we can add most value.

- 1. The SMART program currently provides added incentives for certain project types, including building mounted, canopy mounted, landfill, brownfield, agricultural, floating, community solar, and projects serving low income or public entities, projects with energy storage, and axis tracking. DOER seeks additional feedback on changes or improvements that will advance*

achievement of the Commonwealth's 2050 GWSA mandates while balancing land use, equity, and economic considerations. A. What project type incentive changes could improve program outcomes? B. Should other project types also be prioritized?

As DOER is aware, there have been significant changes in the cost assumptions for solar project development including interconnection and supply chain delays, as well as financial market challenges primarily as a result of higher interest rates. There have been some market shifts particularly in energy storage systems ("ESS") as production for the distribution scale sector has waned in favor of both residential and larger standalone usage and transmission scale. DOER also recognized in its recent *Charging Forward* report on ESS that permitting restrictions vary greatly among the 351 municipalities.

The challenges of pairing ESS with building mounted solar have been particularly acute. Some industry representatives have been meeting regularly with the State Fire Marshal's office to address concerns regarding building mounted solar and ESS and the state fire code restrictions that have impacted many building mounted projects. We suggest that DOER revert to a more flexible application of the energy storage adder as an incentive at the discretion of the STGU owner and not an eligibility requirement. Specifically, we would recommend removing the ESS adder requirement for all building mounted projects and allow developers to utilize this technology where the market and building code permit it.

At the same time, the market and permitting challenges affecting distribution scale ESS are formidable. We echo the findings and recommendations of DOER's report that, while the Commonwealth is approximately halfway to its storage goal, some review and intentionality is needed with respect to ESS incentives, and we believe that the Commonwealth can more effectively facilitate essential ESS deployment by using procurement strategies and reconfiguration of existing standards than by requiring ESS pairing under the SMART Program.¹ "While energy storage policies and programs in the Commonwealth have played a key role in spurring this deployment, barriers remain to unlocking the full potential of energy storage for the Commonwealth."² With this in mind, we suggest that ESS be removed as a base eligibility requirement for projects 500 kW and greater while still maintaining the ESS adder as an incentive. We believe this approach will be more in line with current market conditions and give project developers greater flexibility to better pursue both solar and ESS.

¹ *Charging Forward: Energy Storage In A Net Zero Commonwealth*, A Report of the Department of Energy Resources In Consultation with the Massachusetts Clean Energy Center, p. 7, 18 (December 31, 2023).

² *Id.*

4. Is the current SMART reservation period (excluding any blanket extensions) adequate given current development and construction timelines? If possible, please provide a representative project timeline inclusive of key project milestones, such as permitting, procurement, and interconnection, to help inform DOER's understanding of the development process and current project timelines.

During its proceeding on net metering,³ the Department of Public Utilities ("DPU") held multiple technical sessions and received stakeholder comments on the development of its "system of assurance" now known as MassACA. Of particular issue was what the threshold should be designed to establish a sufficient amount of project development progress to warrant securing a net metering cap allocation but not something that was either inequitable across projects or otherwise too high a bar. Ultimately, the DPU arrived at requiring (1) an executed ISA, (2) non-ministerial permits and approvals, and (3) evidence of site control. DOER has also utilized these criteria as part of its Solar Carve-Outs and the SMART Program. Generally and conceptually, there is a soundness to this structure. But as project development has evolved over the last 10+ years, it is important to ensure that these criteria are not creating inequitable barriers to entry.

As DOER is well aware, interconnection time frames, not just for construction, but for receipt of an ISA, have changed considerably with the advent of group studies, ASO studies, and now CIP proceedings at the DPU. Even ten years ago, when the ISA became a requirement for the Solar Carve-Out and net metering, the tariff was amended by creating the so-called "Early ISA" after completion of the impact study. Traditionally, customers did not receive an ISA until a detailed study was finished. With the advent of the ISA as an eligibility requirement for incentive programs, this accommodation for an earlier ISA was made with the trade-off of the customer's accepting a $\pm 25\%$ cost differential instead of the $\pm 10\%$ offered with a detailed study. Although DOER's current *Statement of Qualification Reservation Period Guideline* (the "SQ Guideline") provides a pathway for equitable treatment among projects that are awaiting ISAs as part of a CIP, it does not directly address the treatment of projects outside those groups. Also, with ISO-NE planning to transition its FERC jurisdiction project queue and study process in compliance with FERC Order 2023, it is evident that the SMART project pipeline will be impacted. In order to ensure stability in the market, we suggest that DOER consider alternative ways in which the executed ISA condition can be met to ensure equitable treatment across different types of projects and service territories.

In addition, as previously noted, there are at least 351 ways to permit solar projects across the Commonwealth. That is not in of itself a problem where local requirements and

³ D. P.U. 11-11, Inquiry into Net Metering and Interconnection of Distributed Generation.

permitting timeframes are reasonable, but the fact remains that the time required to obtain local zoning and wetlands approvals varies greatly across the municipalities. We have seen some communities hold over projects month after month, and in some cases for more than a year. To the extent that some communities take significantly longer amounts of time to review a proposed project, that project should not be further delayed in being able to apply to secure a SMART block position.

We suggest that DOER collect data to determine a rough estimate of the statewide average time to receive a special permit and site plan approval. To the extent that a proposed STGU is some factor above that average it should be allowed to secure a block allocation in the SMART Program (assuming all other eligibility criteria are met). This could be accompanied by some conditions regarding final issuance of the permit, but a project subjected to protracted local processes, with additional costs, should not be further impacted by losing out on block space as a result of something very much outside of its control.

8. Are there solar canopy project types that currently fall outside the SMART program's definition of Solar Canopy that you believe should be eligible for the Canopy adder? Please provide example project types and describe their benefits.

We have seen some varied uses of the Canopy STGU in the built environment with parking canopies at colleges, public schools, and various scales of office space parking. Not only is this utilizing otherwise large expanses of impervious surfaces, but such locations, particularly in education settings, serve as a physical representation of the work underway to combat climate change.

In addition to these traditional deployments, we have assisted clients with development of canopies over agricultural canals as well as other settings including scrap yards. In this context, cars are arranged in rows just like parking lots to allow customers to scavenge for parts, rotating in new stock frequently. While these arrangements are currently eligible under the current Canopy STGU because they involve parked cars, the configuration raises the possibility of other similar uses. There are any number of potential uses for solar canopies, particularly in the industrial sector, such as construction equipment and/or materials storage, lumberyards, nurseries for piles of mulch and other supplies. The common theme – which we believe the Commonwealth should encourage – is finding land already in use for one purpose and adding solar as an additional, compatible use of the same land.

13. Are there any Commonwealth policies (e.g., renewable energy goals, land use priorities, housing policy) that you believe the SMART program inadvertently conflicts with? Please describe any potential

modifications to SMART that would alleviate these conflicts. 14. Is there any additional feedback you wish to provide to DOER?

Appropriate land use, including maintaining and growing land in agricultural use, is a vital policy imperative for the Commonwealth. As DOER is aware, farm viability is a significant challenge with a large percentage of aging farmers, limited succession plans, and high cost of entry for new farmers.⁴ Past comments to DOER regarding the *Guideline on the Definition of an Agricultural Solar Tariff Generation Unit* (revised June 16, 2023) (the “Guideline”) have highlighted the need for creativity and innovation in the agricultural sector to provide farmers options to maintain or diversify their operations. Stabilizing energy costs and long term revenue streams are two basic ways in which ASTGUs can assist farmers in their planning. We understand that DOER designed the ASTGU incentive with this purpose in mind. The current interpretation and language of the Guideline, however, is overly restrictive and has the unintended consequence of making the conversion of agricultural land the more viable option.

Specifically, the Guideline’s blanket ban on tree removal without regard for the types of tree, the basis for removal, or avenues for mitigation, has created uncertainty and risk for many proposed ASTGU projects. We appreciate what we perceive as DOER’s desire to preclude removal of prime or mature forested land. Our forests are not only important habitats but major assets for carbon sequestration, a necessary part of combatting climate change. Yet there are many kinds of “trees” that result from varied land management practices or the failure to appropriately maintain land. For example, a farmer may allow growth in her pasture lands to provide shade for her livestock. If that same farmer decides to install solar canopies on that pasture, which will provide shade to the animals, then the trees are no longer needed from the farmer’s perspective. And yet, current rules preclude her from taking down those trees. Other farmers may have purchased land that had once been pasture, but has been dormant and unused and as a result is overgrown with various scrub and brush, and trees, and if they want to return that land to pasture by clearing out the overgrowth for safe grazing, and install an ASTGU, they are unable to do so. In all instances the land could be converted to non-agricultural use and the trees removed. We do not believe this Guideline was designed to make it harder for farmers to maintain the agricultural use of their land, yet unfortunately this is often the result.

⁴ “Between 2001-2016, more than 27,000 acres of agricultural land was lost to development, representing enough land to generate as much as \$26 million in annual agricultural revenue. More than a third of this land was some of the Commonwealth’s best farmland.” <https://farmland.org/project/farms-under-threat/> (last visited February 1, 2024).

We suggest that it would better serve DOER's combined goals of forest preservation and farm viability to add some clarification, including a definition of the mature, forested land to which the tree removal ban applies. In addition to further refining the more specific types of land and trees subject to the tree removal ban, we believe that DOER should look to mitigation strategies as a way of addressing land use. These could include implementing and expanding upon existing pollinator-friendly legislative directives for solar incentive programs.⁵

We think a straw proposal that provides some additional clarifying definitions of mature forested land, clarifies the types of land where tree removal is prohibited or the siting of ASTGUs is otherwise precluded, while instituting some mitigation features on other types of parcels, strikes a balance that supports both land use and clean energy goals of the Commonwealth.

We also note that the current Guideline is heavily focused on a range of detailed, ongoing requirements regarding crop yield, shading, and spacing for farm equipment. In our experience, farmers are reluctant to assume, let alone attest, that there is any guarantee with respect to crop production, and sadly the last few years have not assuage those fears as our state has experienced the impacts of climate change, ranging from extreme drought to massive flooding.

While we appreciate the desire to insulate the farmer from the possibility of any negative outcomes from the installation of an ASTGU, the current Guideline does not incorporate many best practices that farmers employ with respect to crop rotation, and in fact takes away the farmer's agency in such management decisions. These requirements also cut against the very innovation these farmers need to utilize for their own continued operation, and to combat climate change, such as regenerative agriculture, or other models to rethink how land is used productively and with less impact. So long as the farmer is able to maintain eligibility for the land as required by chapter 61A, this should be sufficient to establish continued use of the land for agricultural purposes. We note that chapter 61A was amended by the legislature in 2022 specifically to incorporate solar projects that allow for the continued agricultural use of the land as a basis for retaining the land in 61A. This legislative change affirms the intent both to

⁵ St. 2016, c. 75 § 11A (as inserted by St. 2022, c. 179 § 63).

allow and expand the ability of farmers to site these projects, but also that they must meet the underlying requirements of 61A.

We suggest opening the Guideline to receive input from the farming community in particular regarding current thinking and best practices. The critical aspect here is to incorporate the necessary flexibility for farmers to adjust their land management to respond to changing climate or markets. There is no question that ASTGU policy needs to center the farm operation and the land impacts, but as currently implemented this Guideline is in fact not doing that as it is constricting a farmer's ability to respond appropriately to changing markets or climate.

Building on our comments above about broader use of the Canopy Adder, another possibility would be to make greater use of the Canopy Adder in the agricultural context. The Canopy Adder has significant policy appeal because it is by definition a multi-tasker. In addition to increasing opportunities for usage of the Canopy Adder in the built environment, we suggest that another way for DOER to approach agricultural solar projects is to create an Agricultural Canopy Adder. Canopies are already a Category 1 use on agricultural land. By carving out some agricultural uses other than crop production for use with canopies, DOER may be able to more effectively target and address the practices it wants. For example, an Agricultural Canopy could involve storage of farm equipment and supplies.

In sum, we think that a key to more workable Guideline that advance these vital agrivoltaic projects would be a stakeholder process to center the needs of the farmer in terms of flexibility in land management, crop selection, and diversification to allow farmers necessary control of their operations and that the solar is developed, constructed, and operated with this in mind.

10. What modifications to SMART incentive payment calculations, as currently set forth in 225 CMR 20.08, if any, are needed? Please provide examples formulas or calculations for DOER review.

As DOER is aware, with the adjustments in the Value of Energy ("VOE") workbook for 2024, the incentive payment has been zeroed out for many behind the meter projects due to the recent out of market basic service pricing. There are many ways in which DOER could address this issue, including setting a floor for incentive payments to ensure that they are never sold for no value. But there is an opportunity to rethink some of the challenges of siting in the built environment, particularly when solar developers seek to lease roof space from a building owner. In addition to costs associated with building mounted projects generally, landlords can

raise many issues during lease negotiations regarding roof replacement including roof warranties, other tenants' rights, replacement of other equipment (e.g., HVAC) that may interfere with solar array, existing mortgage holders, among many others. All of these issues can pose risk and add costs to those projects that are already generally more expensive to build.

An upfront incentive, as opposed to a strictly performance based one, might assist in the development of one of the hardest to reach areas, small-medium commercial scale projects. Providing an option that frontloads the incentives in some fashion, such as reducing the tariff term to 10 years (net metering would continue for the life of the solar facility outside SMART) and through a phased pre-buy of the incentives. This could be limited to building mounted projects between 26 and 500 kW. This idea poses some regulatory challenges, but this is a cohort of projects for which the SMART Program has not effectively met the development costs and incentive needs. It is evident that it requires something a little different than residential or large scale ground mount solar facilities. As DOER continues to look for ways to further saturate the built environment with solar installations, some creativity around navigating this particular segment will likely be necessary. We offer up these beginnings of ideas as fodder for what we hope is a future session for greater stakeholder input to ferret out a workable approach.

We thank DOER for the opportunity to offer these comments.

Sincerely,

A handwritten signature in blue ink that reads "Courtney Feeley Karp". The signature is written in a cursive, flowing style.

Courtney Feeley Karp