



November 6, 2019

Commissioner Judith Judson

cc. Eric Steltzer, Acting Director, Renewable and Alternative Energy Division, via email

cc. Kaitlin Kelly, Manager, Solar Programs, via email

Massachusetts Department of Energy Resources

100 Cambridge Street, Suite 1020

Boston, MA 02114

Re: Comments on the Proposed Agricultural Solar Generation Tariff Unit Guideline Changes

Dear Commissioner Judson:

The Coalition for Community Solar Access, on behalf of our 65 industry and non-profit members, welcomes this opportunity to comment on the proposed changes to the Massachusetts Department of Energy Resources (DOER) SMART Guideline Regarding the Definition of Agricultural Solar Generation Tariff Units (dual-use) (Guideline) made in consultation with the Department of Agricultural Resources (MDAR). This dual-use program has the potential to position Massachusetts at the forefront of innovation in both agriculture and clean energy. The mere creation of this program is testament to the Baker Administration's commitment to supporting farmers with new ways to expand and preserve agricultural production in the Commonwealth.

Given Massachusetts' leadership on dual-use development, it is critically important that this program succeeds, and yields significant megawatts of dual-use projects; unfortunately, the existing Guideline has not produced this result, and the proposed revised Guideline unfortunately seems designed to repeat past mistakes as well. CCSA urges DOER to establish a permanent Dual-Use Working Group that convenes stakeholders from the agricultural community and the solar development community to improve the existing program Guideline in the immediate near-term and to begin working to develop guidelines to address the additional dual-use applications relevant to the agricultural sector in Massachusetts.

DOER should solicit and receive meaningful input from the Dual-Use Working Group on what kinds of agricultural products and practices would benefit from dual-use projects, and whether the current program design and incentive structure can support these projects. To proceed with revisions to the existing Guideline without such feedback will result in a SMART dual-use program that does not account for or encourage development of the various solar applications presently available to the agricultural sector in Massachusetts. A robust and healthy agrivoltaic program can further the Commonwealth's greenhouse gas (GHG) reduction and Renewable Portfolio Standard (RPS) goals, all while providing significant benefits to participating Massachusetts farmers.

CCSA believes the most critical tool DOER can use to improve this program is the power to convene a stakeholder working group. This would allow stakeholders to identify flaws with the existing Guideline and provide recommendations for an improved program structure. However, should DOER choose to forego a working group, the industry maintains it is critical for the Department to convene a study to determine why the existing Guideline has failed to encourage significant megawatts of dual-use

development. Accordingly, in the alternative, we recommend DOER forego significant program changes until that study and analysis is complete and avoid revisions to the Guideline that make the already challenging program more complex and restrictive. Finally, as with any program revisions, DOER should not make changes to existing Guideline retroactive; instead, any changes (though unadvised at this time) should only be applicable to new projects not in development at this time.

I. Background

Dual-use solar projects alleviate financial instability for farmers through long term solar leases, giving them the confidence to continue farming operations and often enabling them to expand their agricultural production and farm plans. If designed correctly, this program could become an economic development tool that could help preserve and increase farmland at a time when it is difficult to guarantee that the next or even current generation can still farm. Unfortunately, as currently designed, the program imposes unnecessary, cost-raising requirements that have discouraged most landowners from attempting to install these kinds of projects. The consequence has been that nearly all of the ground-mounted solar projects qualified for SMART have avoided the dual-use program.

The current guidelines, released to the public on April 26, 2018, provide a foundation for this program that could be improved through additional stakeholder input. A handful of dual-use projects are now being developed by a number of CCSA members, and if realized, these projects will not only benefit the farms that host them, but will provide millions of dollars in savings and tax benefits to customers and municipalities over the life of the projects. The proposed changes to the dual-use guidelines, however, risk moving the program in the wrong direction and further restrict dual-use opportunities. Indeed, the latest data from the SMART program indicates there are only 6 MW total allocated under the Agricultural adder¹ and none are yet online. We strongly urge DOER and MDAR to consider our recommendations that we believe would allow for a more robust, viable opportunity for solar developers while providing Massachusetts farmers much needed revenue to maintain their operations.

II. Recommendation: *DOER Should Immediately Convene a Dual-Use Stakeholder Working Group to Update the Guidelines and Address Ongoing Issues*

There has been insufficient public discussion about both the direction of the dual-use program and the challenges that have prevented the current program from expanding beyond a handful of niche applications. Designing a workable program to support both agricultural and energy production is complicated, and there are countless nuances that will likely get lost in the written comment process. For this reason, CCSA and its members urge DOER to convene a working group of diverse stakeholders to evaluate which aspects of the current program are working, and what changes may be needed to increase the program's chances of success. The stakeholders should include the Secretary of Energy and Environment or an appointed representative, farmers and farming associations, university researchers, solar energy installers, advocates, and any other relevant state parties.

The proposed Dual-Use Working Group should clarify the goals and mission of the program, address the concerns and risks of the program, and propose improvements to the program that can be implemented through changes to the guideline. This working group could be convened immediately, and need not be bounded by the timeline of the SMART regulation. We note that the guidelines for more complex adders – namely dual-use and energy storage – originally were finalized in a separate process. The initial

¹ <https://masmartsolarnationalgrid.powerclerk.com/MvcAccount/Login>

meeting of the Dual-Use Working Group should be scheduled as soon as possible and focus on advancing the dual-use program. We recommend a timeframe of three to six months to agree on proposed new recommendations for the Guideline.

Thereafter, the proposed Dual-Use Working Group should be convened to provide feedback, solve periodic issues, participate in reviews of the program goals and to provide a forum for the development of guidelines around other installation types, such as non-canopy agrivoltaic installations that are currently absent from the program.²

Rather than finalizing proposed changes to the Guideline without engaging key stakeholders in discussions about how to improve the program, we strongly recommend that DOER pause consideration to changing the Guideline to allow the Dual-Use Working Group to meet and work together on recommendations. However, in the event that DOER declines to pause this process, we provide the following recommendations.

III. Alternative Recommendation I: *DOER Should Avoid Wholesale Changes to the Guideline Until It Determines Why the Original Guideline Has Failed to Produce Meaningful Development of Dual-Use Projects*

Some of the proposed changes released on October 15, 2019, are concerning to industry stakeholders as they are particularly restrictive for a program that has not yet seen a single project built. In the original guidelines DOER and MDAR state, “...the initial stakeholder process that led to the promulgation of the regulation, will provide the necessary flexibility for the Department, in consultation with MDAR, to make modifications to key eligibility criteria as lessons are learned in constructing and operating ASTGUs.” CCSA believes therefore that proposing changes at this time is premature, as there is insufficient data upon which to base new rules. We urge DOER to not make any significant changes to the program beyond clarification of definitions until the first projects are built and have been in production for a sufficient amount of time to allow for the collection and analysis of the necessary data.

It is unclear from the proposed guidelines released and the presentations made by DOER what underlying issues the Departments are seeking to address as it pertains to dual-use. The industry would like to see further explanation with data which the Administration is basing their recommendations in order to better inform conversations about the direction of the program.

Therefore, CCSA recommends that in the absence of a Dual-Use Working Group, DOER initiate a study to determine why specifically projects that have applied to the program have been approved or denied. In addition, DOER must hear from the agricultural community as to why they are foregoing opportunities to deploy dual-use projects; the low participation rate among farmers underscores that the current policy may not be working. Landowners are critical partners in development, and we cannot develop projects with a singular focus on compliance with the Guideline. If landowners are not opting for dual-use because of flawed program design, that is critical data and information that DOER must consider in

² These include cranberry bog installations, ground-mounted installations that are designed to allow for agricultural activity around and between panel rows, among others — including not-yet-conceived installation types or installation types that will become possible due to unknowable future technological improvements.

working to improve the program. Without such data and analysis, changes to the Guideline are unlikely to produce successful projects.

IV. Alternative Recommendation II. *DOER Should Avoid Problematic and Counterproductive Program Changes to the Existing Guideline and Any Changes Should Only Apply to New Projects*

The proposed changes add an additional layer of complexity to an already complicated program that discourages farmers and developers from participating in dual-use. Farmers are already faced with difficult decisions when it comes to their land. For example, they are often approached by housing developers that would almost certainly take their land out of agricultural use. DOER and the Administration should seek to ensure the dual-use program is made more accessible, not more restrictive.

1. Shade Requirements

The proposed shade requirements are overly restrictive and it is not clear which research this proposal is based on. We urge DOER to avoid making significant changes to design requirements until the proposed Dual-Use Working Group can provide analysis.

2. Land Equivalent Ratio (LER) Requirements

We suggest that the LER requirement be thoroughly discussed in the proposed Dual-Use Working Group. While we appreciate the intention behind the proposed provision for agricultural output, the projected crop yield can still be a subjective number. It is not a definitive and independent determination of a project's success. We would suggest using third-party verification of the LER, perhaps through a Natural Resources Conservation Service (NRCS) Conservation Planner.

3. 2.5 MW-DC Cap

The proposed 2.5 MW-DC cap would render many dual-use projects economically nonviable. In fact, if the intent of the cap was to decrease the land footprint of the projects, this MW cap could have the opposite effect. Effectively the cap would decrease the energy production because developers would be pushed to use Single Access Trackers, using the same or more land.

Further, at this proposed 2.5 MW-DC capacity limit, many projects would not be able to tolerate the interconnection costs and these projects would not move forward. The economies of scale flexibility provided under the current Guideline enables projects to endure the large interconnection costs seen across the Commonwealth.

With a dual-use design many farmers need more than 2.5 MW-DC to fully utilize their property and receive enough income. Finally, we note that the combination of the other dual-use requirements serves to effectively optimize a design for a particular farmer. Placing a blanket size cap on top of that is unnecessary and overly restrictive.

In public presentations, when asked what the basis for the DC cap, DOER stated that it did not have any analysis for picking the size limitation. If analysis were to be made available by DOER as a rationale for the cap, the proposed Dual-Use Working Group could consider this rationale in its recommendations.

4. New "Optimized Balance" Definition

While there should be a goal of efficient and successful agricultural use and energy generation, the proposed definition of "Optimized Balance" equates crop yield and energy yield. These are

not comparable measurements and it is not a straight-forward indicator of project success.

We appreciate that the Departments have attempted to clarify how to “optimize a balance between the generation of electricity and the agricultural productive capacity of the soils beneath.” With more context on the intent of this definition, proposed Dual-Use Working Group could come to consensus on a definition.

Finally, farmers and landowners have already committed to dual-use projects that are in various stages of development and were intended to be built next year. If implemented as proposed, the Guideline changes would deny those families the opportunity to participate in and benefit from the dual-use agriculture program after investing substantial time and energy building a relationship and business plan with their developers. Likewise, CCSA’s members stand to lose significant investments already made in dual-use projects that were intended to be built next year. Therefore, if DOER moves forward with changes to the Guidelines at this time, they should only apply on a forward-going basis with appropriate provisions for ensuring that the existing Guidelines are applicable for mature projects in development.

CCSA made a similar argument along with the Joint Commenters, in our response to the SMART 400 MW review straw proposal. Development timelines are long, and it is unreasonable to expect or anticipate that a developer can modify an existing dual-use agricultural project mid-development. This program, like the broader SMART program, requires consistency, predictability and fairness, and any changes to the Guideline that become effective upon publication will have a negative impact on the farmers and projects in development.

V. Conclusion

We appreciate the opportunity to provide feedback on this increasingly important segment of the SMART program. With improvements to the current program, dual-use projects could provide a win-win for Massachusetts farmers and ratepayers. We strongly urge DOER to consider our recommendations if it wants to see more than a handful of projects qualify for what is currently a mostly unworkable, niche program. We appreciate the Department’s focus on this issue and welcome the opportunity to discuss our comments in greater detail.

Yours sincerely,

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