Via Electronic Filing

October 27, 2021

Gina Bellato, Solar Program Manager
Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Re: NECEC Comments on Draft Agricultural Solar Tariff Generation Unit Guideline

Dear Ms. Bellato,

The Northeast Clean Energy Council ("NECEC") and the Massachusetts Farm Bureau Federation ("MFBF") appreciate the opportunity to provide comment to the Department of Energy Resources ("DOER") regarding the draft Guideline Regarding the Definition of Agricultural Solar Tariff Generation Units ("Draft Guideline"). The Draft Guideline represents an opportunity to promote dual-use solar in a way that increases clean energy deployment, and preserves natural and working lands and contributes towards the Commonwealth's climate goals by preserving carbon sequestering land; however, the Draft Guideline requires several changes, as described below, to drive responsible dual-use development.

NECEC is a clean energy business, policy, and innovation organization whose mission is to create a world-class clean energy hub in the Northeast, delivering global impact with economic, energy and environmental solutions. NECEC is the only organization in the Northeast that covers all of the clean energy market segments, representing the business perspectives of investors and clean energy companies across every stage of development. NECEC members span the broad spectrum of the clean energy industry, including clean transportation, energy efficiency, wind, solar, energy storage, microgrids, fuel cells, and advanced and "smart" technologies.

MFBF is a non-profit association that promotes and represents the interests of farmers in the Commonwealth. It is a federation, or union of smaller organizations, which consists of 12 County Farm Bureaus representing a total of nearly 6,000 member families. MFBF, along with Farm Bureaus from the 49 other states and Puerto Rico, is a member of The American Farm Bureau Federation (AFBF). The county, state and national organizations are all linked and work closely together, but they remain independent organizations. Nationwide there are about 2,800 County Farm Bureaus representing a total of more than 6 million member families.

The eligibility criteria detailed in the Draft Guideline are overly restrictive and will allow only an unnecessarily limited set of dual use projects to qualify for the adder. As a result, this would be a missed opportunity to allow developers and farmers to design the solutions that are most beneficial to preserve agricultural land from more carbon intensive development that permanently removes the land from its existing use.

Dual-Use Agriculture (or agrivoltaics) can take many forms, but each installation type falls under one of three approaches, as outlined in the National Renewable Energy Laboratory's 2013 technical report, *Overview of Opportunities for Co-Location of Solar Energy Technologies and Vegetation*: 1) Vegetation-Centric Co-Location, which is characterized by actions that serve to maximize agricultural production and minimize changes to existing vegetation management activities; 2) Energy-Centric Co-Location, which is characterized by actions that serve to maximize solar energy output while also promoting vegetation growth under and around the solar installation; or 3) Integrated Vegetation-Energy-Centric Co-Location which seeks to integrate both energy output and vegetation production goals.[1]

It is our understanding from participating in the design phase of the SMART Program that the Agricultural Adder was intended to encourage creative project designs in response. As Massachusetts begins to see the fruits of this labor, it is important to ensure that the Guideline contains not just appropriate guardrails to support the agricultural success of this land, but the flexibility of various designs and plans. At this stage, it is critical that the adder allow farms and solar operators to pivot during both design and operation of the agrivoltaic system as needed to maximize outcomes for both aspects. Unfortunately, as drafted the Draft Guidelines do not provide this necessary flexibility.

Many of these requirements are overly restrictive and remove this necessary flexibility, which will likely only allow a very limited number of projects to qualify for the adder, far short of the amount needed to meet the Commonwealth's decarbonization and resiliency goals.

Below NECEC and MFBF provide comment on specific aspects of the Draft Guideline.

(3)(b)(v). Maximum ASTGU Rated Capacity

NECEC and MFBF appreciate that the DC project size and DC:AC ratio caps were increased from the straw proposal. We continue to believe, however, that the DC:AC ratio is unnecessary with the presence of a 7.5MW DC project size cap. Especially given the constantly evolving nature of the energy storage market, a DC:AC size restriction would limit a developer's ability to design a solution that meets the needs of both the farmer and the developer. Given the other requirements an ASTGU must satisfy and the difficulties a DC:AC requirement would create for paired solar-plus-storage projects, NECEC and MFBF recommend removing this requirement.

[1] NREL: Overview of Opportunities for Co-Location of Solar Energy Technologies and Vegetation, pp. 5-8

(4) Eligible Farmland

Under the Draft Guideline, to be eligible, newly created farmland must have been in active agricultural use and managed by a commercial enterprise for three years prior to submitting an application to SMART. This language is unnecessarily restrictive and would not facilitate the creation of new or reactivated agricultural land in the Commonwealth. There are guardrails already in place to prevent gaming.[2] This Draft Guideline has the potential to facilitate the creation of new farmland by providing a steady, underlying revenue stream to prospective farmers that would mitigate risk and help the financing of a new farming venture; it can mean the difference between achieving the creation of new farmland and seeing it developed with permanent, carbon-intensive uses. Requiring three years of prior agricultural use, however cuts directly against this long-stated desire of the Commonwealth (i.e., additional acreage in agricultural use). Requiring active agricultural use for three years will likely prevent some farmers from bringing new land into production because of the absence of solar-related revenue. This could have the effect of seeking additional greenfield development, which cuts against land use goals of both DOER and MDAR. As such, the requirement that new farmland be in agricultural use for three years prior to submitting a SMART application should be removed.

(5) Agricultural Plan

The Agricultural Plan requires that ASTGUs on Important Agricultural Farmland to demonstrate a history of production of the proposed agricultural commodity for at least three years preceding a SMART application submission. While NECEC and MFBF recognize the desire to ensure agricultural production on Important Agricultural Farmland, there may be legitimate reasons to alter the commodity on the proposed ASTGU site, and the Draft Guideline does not allow for this. NECEC and MFBF recommend that the Draft Guideline remove this requirement in recognition that the most important policy goal should be the preservation of the soils on the Important Agricultural Farmland and not necessarily what is being produced on it in any given year.

(6)(i). Waiver for Decreased Yield

While NECEC and MFBF disagree with the Draft Guideline's overly restrictive eligibility criteria regarding yield requirements, we appreciate the attempt to provide flexibility by offering the waiver for unexpected circumstances that may reduce agricultural yield. We are concerned, however, by the proposal to not allow applicants to apply for waivers in consecutive years. As the impacts of climate change worsen, the potential for devastating weather events, proliferation of invasive species, and other climate change-related issues is increasing and becoming a

[2] For instance, there are significant repercussions for non-compliance with the adder requirements, including loss of the adder and, given the nature of the location of many agricultural projects, potential disqualification from SMART altogether.

recurring challenge to agricultural production. However, the waiver does not have necessary definitions of what kind of decrease would constitute a need for a waiver (as opposed to climate or weather based decreases). NECEC and MFBF recommend removing the yield requirement entirely[3] or, at a minimum, incorporating the existing framework established for 61A for continued eligibility.

Conclusion

Thank you for your consideration of NECEC and MFBF's comments on the Draft Guideline. With revisions, the Draft Guideline can capitalize on the opportunity to promote clean energy deployment and preserve and expand the Commonwealth's Natural Capital. Please contact us if you have any questions.

Sincerely,

Jeremy McDiarmid
Vice President, Policy & Government Affairs
NECEC

Brad Mitchell
Executive Director
MFBF

[3] We note that the September 2020 Qualifying Dual Use Agricultural Solar Tariff Generation Units Straw Proposal presentation did not anticipate a yield requirement. Available at: https://www.mass.gov/doc/agricultural-solar-tariff-generation-units-guideline-straw-proposal/download