

Via Electronic Mail

October 30, 2020

Patrick Woodcock, Commissioner
Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston MA, 02114

Re: SMART Agricultural STGU Straw Proposal

Dear Commissioner Woodcock,

NECEC appreciates the opportunity to provide comment on the SMART Agricultural Solar Tariff Generation Units (“ASTGU”) Guideline Straw Proposal to the Department of Energy Resources (“DOER”). NECEC further appreciates DOER’s consideration of industry feedback in declining to adopt many of the previously proposed changes, and we provide further industry feedback on the refined proposal. At the outset, NECEC urges DOER to clarify that any changes to the ASTGU Guideline are prospective and that projects that have already obtained a Statement of Qualification prior to these changes will be allowed to move forward under the Guideline that existed when it received its Statement of Qualification.

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.

Solar and agricultural land can coexist and often complement each other to derive the greatest financial and societal value from the land. We appreciate DOER’s ongoing recognition that Dual-Use Agriculture (i.e., agricultural land that also hosts solar) is a valuable project type to promote through the maintenance of a \$0.06/kWh adder for ASTGUs.

Dual-Use Agriculture 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 biomass 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

Regardless of whether a Dual-Use Agriculture solar project installation is Vegetation-Centric, Energy-Centric, or Integrated/Hybrid, *each* preserves land for future agricultural use. Many Dual-Use applications also improve the land through soil formation over time or provide other important Ecosystem Services to the community, whether through pollination (with the planting of native pollinator vegetation or the use of honey bees), through additional biodiversity Ecosystem Services (through other flora or man-made habitat such as bird and bat boxes) flood control or any number of other Ecosystem Service project designs. This framework is instructive in evaluating the proposed changes to the ASTGU Guideline.

Project Size Requirements

The goal of the ASTGU SMART provisions is to preserve agricultural production, while expanding Dual-Use potential. To this end, the proposal to cap the size of ASTGUs at (a) 2 megawatts, or (b) 5 megawatts if no more than 50% of the eligible farmland based on the DC system size capacity, does not fully account for the variety of ways in which developers and farmers can work collaboratively to enable solar and agricultural uses to coexist in the same area. As drafted, the straw proposal accounts for only one of the three approaches to Dual-Use Agriculture recognized by the National Renewable Energy Laboratory. The straw proposal cap based on a percentage of eligible farmland assumes that the land underneath a solar installation is not preserved for agricultural use. By definition, however, ASTGUs are required to keep land within their footprint both agriculturally viable and productive. We encourage DOER to continue in the spirit of this program by affirming the value of continuing agricultural production beneath and among the solar panels. The cap on the percentage of eligible farmland is especially challenging for small farmers who will have less flexibility for program design under the proposed cap. For the reasons above, NECEC recommends removing the proposal to cap projects between 2-5 megawatts to a percentage of eligible farmland.

Similarly, the proposal to cap the DC size of an ASTGU to 125% of the AC size of the ASTGU is duplicative in light of other size restrictions and creates unnecessary complications for projects requiring energy storage (e.g. those above 500 kilowatts AC as required by the SMART program. 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 recommends removing this requirement.

Recognizing that DOER desires to limit the size of ASTGU installations, NECEC recommends a 7.5 megawatt DC project cap. A DC size cap is simple, straightforward, and provides enough flexibility and certainty for developers to design projects according to important but often shifting drivers of viability, including battery storage, interconnection, landowner rent requirements, etc. A DC size cap would limit the total area a project could occupy while also recognizing the ability for projects to add storage and increase benefits to the grid. The DC size cap is preferable to a DC:AC ratio in that it creates project design flexibility while achieving DOER's objective of limiting the total land area covered by a solar project. This would recognize the value that dual-use projects can provide both to farmers and to society, while ensuring a size cap for projects.

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

Application and Approval Process

The ASTGU Straw Proposal includes a proposal to allow a new alternative approval process if a project meets third-party certification, as is being explored by the American Farmland Trust. NECEC supports this proposal and urges DOER to move forward with this proposal to remove one of the barriers to ASTGU deployment.

NECEC proposes that DOER include language in the ASTGU Guideline that would notify projects at risk of losing the adder and provide a cure period to rectify non-compliance, or explain why the change does not result in non-compliance. There may be instances over a project's lifetime in which a farmer may decide to alter the agricultural production based on natural conditions or changing agricultural strategies, which may include leaving the land beneath the ASTGU fallow. The farmer should be afforded the flexibility to do so, without fear of losing the adder for unanticipated non-compliance. A notification and subsequent cure and/or explanation period would balance the need for flexibility for the farmer, and program compliance for DOER.

Conclusion

NECEC appreciates the opportunity to provide comments on the ASTGU Guideline Straw Proposal. The newly proposed project size requirements are overly restrictive, and ASTGU size requirements should be comparable to the rest of the SMART Program. The proposal to allow third-party certification is a positive step forward and should be advanced. Including a notification and cure period would provide an opportunity for projects to rectify non-compliance before forfeiting the ASTGU adder. Thank you and please contact us with any questions.

Sincerely,



Jeremy McDiarmid
Vice President, Policy & Government Affairs



Sean Burke
Policy Associate