



November 6, 2019

Commissioner Judith Judson
Massachusetts Department of Energy Resources
100 Cambridge Street
Suite 1020
Boston, MA 02114

RE: SMART Program 400 MW Review (*via email to DOER.SMART@mass.gov*)

Dear Commissioner Judson:

On behalf of the Cape Cod Cranberry Growers' Association (CCCGA), I offer comment on the Massachusetts Department of Energy Resource's ("DOER") proposed revisions to the Agricultural Solar Tariff Generation Units Guidelines ("ASTGU"). We are pleased to have agriculture included in the Commonwealth's SMART Program and for there to be guidelines to help direct our agricultural community in a consistent and fair manner. However, as currently drafted, these proposed changes to the guidelines are working against the cranberry industry. Massachusetts cranberry growers have been in a significant economic decline for many years and for some, having access to solar development projects on their bogs provides a mechanism to sustain their farms. The proposed changes to the ASTGU guidelines will make solar opportunities more challenging for all growers and for many projects, they will become economically unrealistic.

Our comments are summarized as follows:

Revising ASTGU Guidelines

- Revising the ASTGU Guidelines now is premature.
- As of this date, there has not been a dual-use cranberry bog project approved by the state yet changes to the guidelines are already being considered. This will make compliance even more challenging than it already is.
- Preliminary research has been conducted by the University of Massachusetts Cranberry Station to better determine the impact of solar panels on cranberry bogs but those initial results have not been accounted for in this draft.
- DOER should establish a working group that includes the Massachusetts Department of Agricultural Resources ("MDAR"), UMass Clean Energy Extension, university researchers and industry stakeholders from all sectors of agriculture, to collaboratively and scientifically evaluate the guidelines.

Minimum Sunlight Requirements

- Increasing the minimum direct sunlight requirement from 50% to 60% and establishing an "average sunlight requirement" of 70% are both decisions being made without a scientific basis.
- Increasing the sunlight requirements now is subjective and illogical.

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- MDAR and the UMass Clean Energy Extension do not have the requisite experience or knowledge base to be making definitive sunlight needs of cranberries. The cranberry industry relies on the science of the University of Massachusetts Cranberry Station and this should be the source for any future shading recommendations.
- The Cranberry Station has conducted a study of the shading impacts of solar panels on cranberries and this preliminary research is showing positive results. More research is required but this initial study should be weighed carefully before changes are considered.
- The guidelines are silent on the plants baseline need for Photosynthetically Active Radiation (“PAR”). This should become part of the guidelines and not a hard and fast shading percentage that does not account for the photosynthetic needs of the plant.

Maximum DC Rated Capacity of 2.5 MW

- The maximum capacity of 2.5 MWDC on battery storage will prevent some viable cranberry projects from moving forward.
- Growers are faced with high interconnectivity costs, coupled with height and wider spacing requirements for dual-use ag projects, necessitating larger projects to offset these challenges in order to make the projects economically viable. DC storage capabilities help to make these projects possible.
- The stated goals of the SMART Program encourage battery storage, yet this provision will prevent viable projects from succeeding economically.
- The size limitation is arbitrary. If a project makes a farm sustainable, complies with the SMART Program, ASTGU Guidelines, local zoning and all other requirements, the size of the project is less important.
- At a minimum, some level of flexibility should be incorporated to allow larger projects to succeed and keep more land in active agriculture.

Crop Yield Requirements

- Although having a consistent metric for benchmarking crop yield is admirable public policy, in this case establishing a yield value of 70% appears subjective.
- MDAR does not have the experience to determine cranberry crop yield requirements.
- Dual-use crop yields have numerous annual variables to consider such as weather impacts, pest infestations, fruit quality, evolving management strategies, grower experience, etc., all of which can dramatically impact the crop yield, yet these fluctuations appear to be ignored.
- Utilizing minimum production requirements from other state programs, such as Chapter 61A, makes more sense than arbitrary yield decisions.
- If an arbitrary yield requirement will be the determining factor, the UMass Cranberry Station should be consulted in establishing yearly minimum crop production figures.
- If Dual-Use Agriculture is about helping to sustain farms, arbitrary yield that attempt to balance solar and crop productivity should be less important than keeping the entire farm operational. It is recognized that a farm-first mentality must be ever present but looking at the long-term viability of the farm is more important than individual years of electricity generation versus crop yield. This mindset is what should be recognized in the guidelines.

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**Conclusion:**

With the implementation of the SMART program, there are opportunities for some cranberry growers to participate in solar energy projects and save their farms. However, the proposed changes to the ASTGU Guidelines could derail many of these prospects. There needs to be more science in the decision-making process and less subjectivity. Stakeholder involvement has been non-existent. This is an opportunity to establish a working group of state officials, agricultural leaders, solar developers and university researchers to establish collaborative and sensible ASTGU guidelines. Agricultural dual-use solar projects that have a research component should be encouraged. The SMART Program is uniquely positioned to help support our agricultural base while simultaneously providing clean energy. Making the ASTGU Guidelines work through a collaborative process is attainable. Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian A. Wick".

Brian A. Wick
Executive Director

About CCCGA:

CCCGA represents more than 325 cranberry growers in Southeastern Massachusetts, Cape Cod and Nantucket. Cranberries are the largest agricultural food commodity produced in the state with an annual crop value of \$60.2 million dollars. Massachusetts is home to 30% of all cranberry acreage and according to the most recent Farm Credit East Knowledge Exchange Report, provides more than 6,900 jobs and a total economic benefit of over \$1.4 billion to the Massachusetts economy.

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