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

Re: Comments on the 400 MW Review Straw Proposal

Dear Commissioner Judson:

Thank you for the opportunity to comment on the Department of Energy Resources (DOER) Solar Massachusetts Renewable Target (SMART) 400 MW Review Straw Proposal that was released to the public on September 5, 2019. Our comments are solely focused on the proposed changes to the agricultural dual-use component of the program.

Agricultural Solar Tariff Generation Unit (ASTGU) projects are an important mechanism for providing farmers with a meaningful economic opportunity and to maintain Massachusetts farmland in agricultural production. This is particularly important given the severe financial difficulties being faced today in many agricultural commodity markets, especially the Massachusetts cranberry industry. The ASTGU component of the SMART program is a brilliant tool to advance multiple goals of the Commonwealth: helping to protect and maintain farmland, supporting struggling farmers, reducing the environmental impacts of solar development, increasing solar power generation and deploying energy storage. In order to promote these aspects of the SMART program, we urge you to consider the following comments:

I. Predictability, objectivity and stability in rulemaking is critical for program success.

a. Farmers and solar developers have invested significant planning and resources to advance ASTGU projects at great expense and risk in response to the initial SMART regulations released on April 26, 2018 – in other words, 17 months ago. Changing important guiding principles now (i.e. imposing a MWDC cap and increasing sunlight requirements), particularly when no ASTGU projects have yet been built and when many have reached a critical juncture in their interconnection, permitting, and business planning, will undercut much of the work to date and harm both industries in the process.

b. Changing guiding principles in the eleventh hour before the first set of projects are built will erode trust in an emerging asset class already viewed as more complex than standard solar, and in a regulatory process trending toward further subjectivity and unpredictability. The proposed rule changes jeopardize our existing arrangements with farmers because projects will not be built as planned, if at all. The $0.06 / kWh adder is significant, and the proposed rule changes will cap the financial benefit available to farmers and decrease solar production and energy storage deployment. They also jeopardize the $1.5 million that NextSun has invested to date to fund interconnection studies, engineering, permitting, and site control for ASTGU projects in the year and a half since April 26, 2018.

c. NextSun has a significant number of dual-use projects under development, all of which have been sized and planned around the current 2.0 MWAC cap. Standard interconnection study timelines can extend to 12 months or more, and because interconnection costs across MA are trending upward, projects with the DC-sizing and storage flexibility required to defray costs and take advantage of emerging storage markets are the ones that will remain financially viable. These larger projects also benefit more farmers, in some cases involving three farmers on a single project. Imposing an arbitrary DC size cap reduces the number of farmers that can participate in the program and will render many projects nonviable.

II. The proposed guideline changes (i.e. size cap and sunlight requirements) create uncertainty and are arbitrary because they do not consider existing data or input from the agricultural community.

a. Every crop has different sunlight requirements, rendering the "one-size-fits-all" approach inherently inaccurate and impractical for program implementation. Proposing to increase the sunlight requirements and impose a DC size cap only exacerbates this problem.

b. Substantial research and data exist demonstrating that many crops can remain agriculturally viable even in high shade environments.

c. It is possible to estimate the impact to crop yield by comparing the amount of photosynthetically active radiation (PAR) received by the plant with and without the dual-use canopy present.

d. There is no reason (and no evidence was presented by DOER to substantiate) to increase the sunlight requirement or limit project size given the available research and tools available for assessing yield impacts.

III. A working group should be established that includes farmers, crop experts and solar developers in order to develop improved ASTGU guidelines that provide clarity and certainty to program participants.

a. We support DOER's efforts to improve the ASTGU guidelines and thereby improve the ASTGU pre-certification process. To date, the pre-certification process has been unclear, slow and highly subjective.

b. DOER and MDAR have denied ASTGU projects which fully comply with the ASTGU guidelines, rendering those guidelines useless – if a project meets the guidelines but is denied pre-certification then the guidelines serve no purpose.

c. Farmers, crop physiology experts (e.g. UMASS Cranberry Research Station) and solar developers were not involved in crafting the current ASTGU guidelines, which has resulted in uncertain and impractical guidance. It appears that none of these stakeholders are being consulted now as part of drafting the proposed revisions to the ASTGU guidelines, which will result in the same problems.

d. It should be the goal of the working group to develop a new methodology that accounts for the varying sunlight needs of different crops in an objective manner while providing certainty to program participants. This can be accomplished by analyzing the PAR needs of a given crop and the impact to PAR from the proposed ASTGU shading profile.

IV. Crop yield is not the appropriate metric to determine program success.

a. There are more important factors than yield to assess when evaluating the success of the ASTGU program, including:

i. Maintaining land in agricultural use;

ii. Supporting farmers financially amidst low commodity prices;

iii. Supporting broader agricultural economies and communities;

iv. Increasing solar generation to protect farming communities and the Commonwealth as a whole from negative effects of climate change; and

v. Mitigating the development of greenfield areas for solar projects.

b. Focusing on maintaining as high of a yield as possible can actually be detrimental to farmers amidst low commodity pricing driven by over-supply (such as the cranberry and dairy markets). For example, during times of oversupply, the federal government employs price support policies in which farmers are paid to not plant crops.

V. Program qualification requirements and ongoing eligibility should be based on clear guidelines that are consistent with other Commonwealth policy and programs.

a. Other state-sponsored agricultural programs, such as Chapter 61A property tax subsidy or the APR program, place either minimal requirements on farmers to maintain production, or no requirements at all in exchange for financial benefits. These programs recognize the wide-ranging benefits to the Commonwealth of maintaining land in agricultural use.

b. Ongoing yield-based eligibility requirements that are outside of the farmer/owner's control will prevent dual-use projects from being able to access critical project financing.

c. Ongoing eligibility should be based on clear and simple requirements that ensure the farmer is making a best effort to perform under the program. We suggest that the following two conditions be used to determine ongoing eligibility:

   i. Adherence to relevant best management practices for the crop (e.g. UMASS Cranberry Chartbook); and

   ii. Meeting the requirements for the Chapter 61A agricultural property tax subsidy program.

Thank you for considering these comments and we hope that DOER will incorporate these suggestions for the benefit of the agricultural community, the solar industry and the environment.

Sincerely,

Adam Schumaker
VP, Development
NextSun Energy LLC