MassLand
MASSACHUSETTS LAND TRUST COALITION

October 30, 2020

Patrick Woodcock, Commissioner
Massachusetts Department of Energy Resources
100 Cambridge Street, #1020
Boston, MA 02114
By Email at DOER.SMART@mass.gov

RE: SMART ASTGU Guideline Comments

Dear Commissioner Woodcock:

The Massachusetts Land Trust Coalition (MLTC) is the state association for the approximately 150 private, charitable land conservation trusts in the Commonwealth. We appreciate the opportunity to submit comments on the straw proposal for the *Guideline Regarding the Definition of Agricultural Solar Tariff Generation Units (ASTGU aka dual use solar/ag).*

MLTC urges that "Prime", "State Important" and "Unique" agricultural land should not have conventional solar facilities under any circumstances, and that dual use facilities should be the only solar facilities permitted on other land suitable for agriculture. As further detailed below, we urge the Commonwealth to delay incentivizing dual use projects until a number of critical pre-conditions have been met.

MLTC supports the work of the Commonwealth to diversify the state's energy portfolio and to increase the amount of renewable energy available as we work to tackle the issue of climate change. We are, however, concerned about the development of greenfields for large-scale solar development and suggest that while climate change is a pressing issue, we must use caution in the siting of solar instillations on lands which can contribute to carbon storage and food production, especially given the gaps in our food system highlighted by the pandemic. The new land-use guidelines included in the finalized SMART Emergency Regulations are a step in the right direction.

However, the SMART ASTGU Guideline reverse the state's enumerated land use goals for protection of rare species, forest blocks, and lands of highest importance for climate resiliency by including dual use solar/ag projects in Category 1, thereby opening these sensitive lands to solar development. This will put DOER's solar financial incentives in direct conflict with the state's land use goals for protection of rare species, forest blocks, and lands of highest importance for climate resiliency.

We have the following specific comments regarding the straw proposal:

- A program providing blanket approval of dual use, or any program which converts agricultural or forest land to PV without guidelines to ensure that the agricultural and forestry resources will remain viable, must be prohibited if we are to meet the Commonwealth's food policy objectives as well as those of the Global Warming Solutions Act. Additionally, the only land associated with farms that should be considered for solar facilities that are not dual-use is "waste land" not useable for agriculture or forests, such as farmyards, gravel pits, clay or bedrock surfaces.

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- Agriculture should remain the primary use on a dual-use property. The effectiveness of dual-use solar on agricultural lands in New England has not been proven. The state needs to take a pause on approving any new dual-use solar installations until data on dual-use solar installations' impacts on a variety of agricultural products in our region can be analyzed as to factors such as 1) standards applicable to assorted crops and forage, including height and total coverage and compatibility with current and projected future farming practices. For example: the 50% shade criterion exceeds the 32% shade area allowed in Japan, where more research has been conducted to date. There is insufficient replicable data that supports the theory that New England's agriculture can be conducted under shade. In addition, more research is needed into the impact of such installations on key sectors of the agricultural economy such as dairy, where solar projects may outcompete farms for access to critical land. It is imperative to proceed slowly to better understand the impacts of such a major change in state policy.. Among concerns to be addressed through such research is the viability of higher value crops, dairy operations and other agricultural operations that require open acreage under dual use. If high value operations are not viable or produce lower yields under solar, this will incentivize a shift to other crops, which may undermine years of investment into the state's Food System Plan goals.
- MLTC supports a vigorous pilot program to determine if dual use is agriculturally viable for the farm as well as financially viable for the PV owner,, to determine under what circumstances dual use might be appropriate and supported..
- The agricultural adder should be unavailable for conversion of farmland and for dual-use installations should be considered only after a dual use program is 1) proven to keep the agricultural land viable and 2) can be managed with sufficient and feasible certification and enforcement mechanisms that have been designed to ensure that the dual use systems are constructed and operated as proposed. There is no indication that this has been done to date.
- For certified dual use projects, yield goals/reporting must be required. Yield should be measured in both pounds/tons or other applicable quantifiers per acre, and net revenue. The October 2019 revisions codified the long-stated Masschusetts Department of Agricultural Resources philosophy that the agriculture in a dual use field should have increased productivity that would offset the area lost to the shade and physical structure of the solar array. Increased yield is a critical policy goal that must be codified to fulfill the promise of truly "dual" use.
- Third-party review should be by an organization that 1) has the expertise in growing conditions for all potential crops so that the reviewer can comment substantively on whether the agricultural plan would work in a traditional farm setting, never mind under panels, and 2) is, and is perceived, as a neutral party. An entity with expertise like UMASS Extension is the obvious choice to oversee the dual use program, but it must be funded by applicants and not given a new "unfunded mandate" by the State.
- Enforcement of dual use must be clear, recognized by all, and funded. If the projected agricultural component of dual use is decreased or suspended, subsidies to the utility and all payments to the landowner must be suspended. State subsidy funds which would have been allocated to that facility should be placed in a fund administered by MDAR to ensure compliance program-wide.
- Solar should be sited on the farmland least suitable for farming, not on prime farmland, unique farmland and additional land of statewide importance.
- No Agricultural Preservation Restriction on farmland should be broken or interpreted to allow for dual-use.

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- Regulatory programs that provide exemptions for agriculture, including natural heritage endangered species program, wetland and flood plain regulations, should not exempt any solar facilities, even if they are entirely or partially classified as dual-use.
- Policy regarding farmland development for solar should align with other state initiatives including the Healthy Soils Action Plan and the Resilient Lands Initiative, in addition to past EEA work on maintaining agricultural viability in consideration of solar siting.
- DOER refers to "stakeholders" who support the Straw Proposal rollback, but all Massachusetts residents are stakeholders in maintaining our remaining agricultural resources, which are among the smallest in the nation. To be sure, low-carbon electricity is essential to a sustainable Commonwealth, but so are locally produced food and a viable agriculture economy. Much farmland in Massachusetts is owned by non-farmers. Incentivizing farm conversion to solar may benefit non-farmer landowners but harm farmers who lease land and thereby undermine our food system. DOER needs to ensure all farming voices are heard and their contribution to statewide food production is maintained.

The Massachusetts Land Trust Coalition includes reduced carbon emissions and increased carbon storage among its most important goals. Stimulating a diverse array of non-fossil electric generation and storage options is understandably vital to meet the standard of "100 By 50". However, many other state goals, including environmental justice, public health and wellbeing, diverse natural ecosystems and the vital components of food production should simply not be sacrificed to accommodate preferences of ground-based solar developers. Where solar facilities are able to be sited without material damage to other important public needs, they should be subsidized only after research determines that the public needs remain protected, and after a program is created to ensure that balance.

The October, 2019 SMART regulations were an important step in this direction. We urge that you dramatically revise the Straw Proposal to prevent a most unfortunate step backwards.

Sincerely

Robb W. Johnson

Robb Johnson
Executive Director