

June 1, 2020

By Email to: DOER.SMART@mass.gov
Patrick Woodcock, Commissioner
Massachusetts Department of Energy Resources
100 Cambridge Street, #1020
Boston, MA 02114
Re: SMART Program Emergency Regulation Comments

Dear Commissioner Woodcock:

I am writing to provide comments regarding the SMART Program Emergency Regulation, which went into effect April 14, 2020. As the chair of my town Energy Committee and a member of my town Conservation Commission, I am strongly supportive of solar development within the state, to combat climate change and achieve our greenhouse gas emissions goals. I have significant concerns regarding how solar development has progressed under the SMART program, some aspects of which have been addressed in the updated regulation, but a number of which have not.

1. Land use provisions have significantly improved, but large-scale “greenfield” development can continue to be expected, unless further changes are made.

I am strongly supportive of DOER’s Category 2 and 3 land use siting provisions, protecting BioMap2 areas, including Core Habitat and Critical Natural Landscapes. As you are aware, BioMap 2 is designed for this very purpose – to guide protection and conservation of the areas that are most critical for ensuring the long-term persistence of rare species and their habitats, exemplary natural communities, and critical ecosystems. I appreciate your efforts to protect vulnerable habitats. In order to balance to the protection of natural resources with the development of renewable energy, I believe that DOER needs to develop a solar incentive program that works in harmony with other important state priorities and programs, notably the Commonwealth’s commitment to land conservation and its recognition of the important functions and values that natural lands and farmlands provide, including carbon sequestration and resilience to the unavoidable impacts of climate change. Additional changes that should be made include:

- **Including land siting requirements for “Public Entity” projects.** To protect the key habitats and ecosystems that DOER recognizes with its restrictions on the use of lands on BioMap 2, all large (>500 kW), “greenfield” projects - even Public Entity projects - should be subject to BioMap2 restrictions, and should not qualify as Category 1 projects. This “Public Entity” loophole, that includes a 4 cent per kWh adder, would continue to leave important natural ecosystems vulnerable to development, and to leave volunteer municipal boards vulnerable to exploitation by savvy developers. There is no need to encourage development of undeveloped public land, and there is clearly no benefit to ratepayers – the existing program has shown that ground-mounted solar facilities can be developed cheaply. If DOER wants to encourage public projects, it should increase the Public Entity Adder, as it has done.
- **Increasing the Greenfield Subtractor.** The 2.5x Greenfield Subtractor appears woefully inadequate to discourage development of undeveloped areas. Based on DOER’s numbers, a 5 MW DC project in Category 2 would still get 93.4% of the baseline incentive, and if it developed as “pollinator-friendly” it would get 95.6% of the base incentive. A 5 MW DC project in Category 3 would get 87% of the incentive, or 89% with the pollinator adder. It

doesn't appear that such a limited subtractor would do much of anything at all to discourage development of non-BioMap2 forests or farmland, at least for Category 2 projects. The subtractor should be higher, and should apply to the entire footprint of the site, not just the square footage of the solar panels.

- **Allowing earlier MESA review.** For any greenfield development, MassWildlife, the MA DEP, and a Massachusetts Endangered Species Act (MESA) review should occur at the outset of the permitting process, not towards the end where there may be less flexibility or openness to site choice or configuration.

2. The Emergency Regulation continues to leave small municipalities, particularly in western and central Massachusetts, vulnerable to solar-related litigation and to large-scale solar development anti-thetical to community values.

Under the first iteration of the SMART program, the widespread rush to develop undeveloped land led to many small towns being inundated with solar proposals. Due in large part to the failure of the Greenfield subtractor - municipal boards (often volunteer entities) have scrambled to deal with multiple large-scale solar development permitting proposals demanded over short deadlines, and often falling outside their areas of experience or expertise. As a desperate response, a number of towns have implemented solar moratoriums, but these are only stop-gap measures. Meanwhile, a number of towns that have rejected solar permits on the basis of inadequate applications or failure of developers to meet bylaws are facing litigation - a cost that small towns with small annual budgets derived primarily from residential taxpayers are in no position to support. Further changes are needed to alleviate the burden of solar development as it is currently being experienced by western and central Massachusetts communities, and already over-burdened volunteer municipal boards.

- **The “solar zoning” exemption for Category 2 projects needs to be more limited.** Most municipalities that have implemented solar bylaws or overlay districts put them in place as a requirement under the Green Communities program, following a model bylaw designed and circulated by DOER. These bylaws and solar overlay districts were designed to regulate development of solar, not to encourage development of undeveloped land. The municipal solar bylaw exemption – which under the Emergency Regulation entitles a developer to only half a subtractor – was written so broadly that it is impossible for a municipality to develop a bylaw that mentions solar without allowing development in that zone to fall into Category 2, rather than Category 3. The solar bylaw exemption includes projects sited by as of right, OR by special permit, OR for any zoning that so much as mentions solar as a potential land use. Meanwhile, towns cannot specifically ban large-scale solar in a zone without fears of facing litigation regarding unreasonably restricting solar development (for example, see the lawsuit that East Longmeadow is currently fighting). Under the Emergency Regulation, we can expect that 60% of greenfield projects would still only get half a disincentive- directly counter to the wishes and intentions of community members and municipal boards. DOER should apply a full subtractor to all greenfield projects where solar is allowed ONLY by special permit. This would allow towns to encourage development in some zones by allowing it by as-of-right (half subtractor), while discouraging, but not prohibiting it, in others, through allowing it by special permit (full subtractor).
- **Better support regarding local solar bylaws is desperately needed.** DOER must work with local communities, regional planning agencies, its Green Communities program, and other statewide stakeholders, to develop an updated solar model bylaw and associated guidance regarding “reasonable” regulation of solar development. This currently open question of what restrictions are allowable for solar raises fears of litigation, and opens towns up to costly lawsuits, which cannot be supported through small town budgets, which largely go to support public schools. DOER needs to explicitly solicit and incorporate feedback from municipal

boards in rural western and central Massachusetts, and work with regional planning authorities to ensure municipalities have adequate time and support to implement appropriate, updated solar bylaws.

- **Litigation support.** DOER needs to provide a fund and technical support, and/or an arbitration mechanism, to assist municipalities in dealing with solar-related litigation.
- **Eversource East and West energy capacity blocks should remain separate.** Combining these blocks into a single service territory allows capacity needed for Eversource East to be sited in central and western Massachusetts, resulting in enormous development pressure in these regions for energy that is not being consumed near where it is generated. The reason the Eversource East territory has been slower to fill up is that there has been a land rush on undeveloped land in western and central parts of the state to develop large-scale, ground-mounted arrays. This change will put yet more pressure on rural areas for large-scale, ground-mounted solar development on undeveloped land, and will discourage creative approaches to development in the built environment. Undeveloped lands in rural areas are already providing myriad valuable environmental and cultural benefits, including carbon sequestration.
- **A public database of PILOT agreements should be compiled.** Developers should be required to provide PILOT agreements to DOER as part of their application. DOER should then make these agreements publicly available on a central website. The site should include a spreadsheet summarizing basic information about the PILOT agreements (e.g. locations, project sizes, agreed payment schemes), with links to each agreement. This site should be updated monthly. These agreements are a matter of public information, but are not assembled in one location.

3. As a basic component of any solar program, DOER should collect, track, and provide to the public data and analysis regarding the environmental and agricultural impacts of solar development within the state.

It has also been impossible to track and substantively comment upon the effects of solar development on ecological and agricultural resources across the state, due to a lack of transparency about where solar projects are being sited. DOER has indicated that it has conducted mapping and analysis of land use relative to solar development, but the maps, analysis, or even underlying data, have not been released to the public. This should have been made available to the public as part of the 400 MW review in September 2019.

- **Public data and analysis should be provided.** DOER should provide a spreadsheet, including latitude/longitude or street addresses, for all large solar arrays (>500 kW) built under SMART and SREC programs, so that researchers and non-profit organizations can conduct their own analyses. This data should also be made available as a GIS layer within OLIVER. These data sources should be updated regularly – at least monthly. This will enable more effective monitoring of the impact of these developments on land types, the effectiveness of the new rules in preventing greenfield solar development and instead incentivizing development on brownfields, developed lands, rooftops, parking canopies, and other appropriate, previously disturbed locations.
- **Additional data should be collected.** Moving forward, DOER should require basic land use information from STGU applicants for all >500 kW (or Category 2 and 3) projects. This should include an attestation from the landowner identifying 1) current land use, 2) any use of the property for commercial agriculture within the past 5 years, 3) any forest clearing over 1 acre that has occurred on the property in the past five years, and 4) the amount of acreage of forest, if any, anticipated to be cleared as part of the solar development.

4. Longer-term planning is needed, to support a sustainable solar industry, meet greenhouse gas reduction goals, and reduce pressure on local municipal boards.

- **Capacity expansion should be based on need, not an “emergency” response.** Rather than being based on an emergency response to alleviate market pressure, the expansion of solar incentive programs now, and into the future, should be based on the need for new solar development, how much solar can be successfully integrated the grid on an annual basis, and how much is warranted to meet greenhouse gas emission reduction goals. We need to foster a sustainable solar industry within the state, which meets local demand. The proposed “emergency” expansion is not necessary to meet stated solar development goals, and fails to achieve the goal of relieving market pressure, which is largely driven by national and international entities.
- **The “balance” struck between solar development on preferred sites (brownfields, landfills, parking lots, etc.) and greenfields should be based on data, not whoever shouts the loudest.** The National Renewable Energy Lab estimates that over 40,000 acres of rooftops are suitable for solar development in Massachusetts. DOER needs to use a transparent process to estimate the availability state-wide of “preferred” and “greenfield” sites, as well as the costs associated with development of solar in these various locations, and then make an argument concerning the right balance to strike between development of undeveloped and developed land, and the cost of electricity. Without this analysis, the discussion devolves into a shouting match between environmental organizations calling for greater forest and farmland conservation, and developers crying that they cannot develop under the strict regulations regarding what are, after all, only incentives – not restrictions on where solar can be developed, but only on where the state will actively pay for and encourage it. We need a plan!
- **Development should be managed based on giving priority to preferred projects, rather than guessing at solar economics.** DOER was completely off in its estimates of the effects of the original greenfield subtractor on development of undeveloped land, as well as how quickly it expected the original 1600 MW to fill up. Instead of guessing at solar economics, DOER should adopt a “managed growth” approach, in which annual capacity targets for solar PV development are filled first with projects located on preferred sites (e.g. residential, brownfields, landfills, etc), with last priority going to projects on previously undeveloped sites. DOER should design a solar program that sets incentives and fills a specific capacity on an annual basis, provides a steadier rate of project application, so that municipal boards are not inundated with permitting requests over tiny time windows.
- **There is a need for a permanent solar advisory group that provides feedback to DOER regarding solar siting, solar incentive structures, the solar energy market, and related topics.** This group should include a diverse range of stakeholders – including solar developers and solar trade groups, financiers, environmental conservation organizations, MassWildlife, agricultural organizations, Mass Department of Agricultural Resources, regional planning authorities, organizations that represent municipal boards (e.g MACC, MMA), and low income/social justice organizations.

5. I am strongly supportive of the Emergency Regulation’s carve-out for medium-size projects, which supports the local solar industry, as well as entities like small businesses and schools, which benefit from these medium-scale projects.

Thank you,

Zara Dowling

Energy Committee chair, Conservation Commission member, New Salem, MA