

July 10, 2017

Kaitlin Kelly
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Via electronic mail:

**Re: Comments Regarding Solar Massachusetts Renewable Target (SMART) Program
Emergency Regulations**

Dear Ms. Kelly:

Thank you for the opportunity to provide comments on the Massachusetts Department of Energy Resources' (DOER) emergency regulations for the Solar Massachusetts Renewable Target (SMART) Program pursuant to Chapter 75 of the Acts of 2016. This is the third set of comments the Conservation Law Foundation (CLF) is submitting in this process. CLF submitted a comment letter on June 30, 2016 ("June Comments") and a second one on October 28, 2016 ("October Comments").

CLF is a nonprofit, member-supported, regional environmental organization working to conserve natural resources, protecting public health, and promoting thriving communities for all throughout New England. CLF has long supported the promotion of solar and other renewable development, the protection of farmland, and the viability of farming in Massachusetts and throughout New England.

As noted in our June Comments, solar development is currently viewed by many in the land conservation and agricultural communities as the number one rising threat to farmland in New England. With the Commonwealth's dual goals of substantial solar development and farmland protection, it is critical that we find a way to provide incentives for solar projects without jeopardizing the land base that supports agriculture in the Commonwealth. Indeed, increased renewable deployment and maintaining/increasing our farmland base are both critical to achieving our greenhouse gas reduction targets under the Commonwealth's Global Warming Solutions Act. M.G.L. c. 21N.

While the large-scale agriculture prevalent in other regions of the country is a major net source of carbon emissions, small farms can act as carbon sinks by employing common conservation or

regenerative methods such as crop rotations, manure and compost inputs instead of synthetic fertilizers, and reduced tillage to build more carbon-rich and productive soils.¹ The vast majority of farms in Massachusetts are small—over 90 percent have annual sales valued at less than \$100,000—and tend to employ such climate-friendly practices.² Protecting and creating carbon sinks like these farms is critically important to reducing greenhouse gas emissions in Massachusetts. In fact, recent analyses have concluded that regenerative and conservation agriculture practices are among the most powerful available solutions to climate change due to their carbon sequestration potential.³

Our October Comments supported DOER's initial effort to limit commercial solar projects on Prime Agricultural Farmland, as defined by the United States Department of Agriculture Natural Resources Conservation Service (NRCS), 7 C.F.R. § 657.5(a), and offered that non-commercial solar developments serving only to support operations on the farm should be eligible for the incentive without restriction. Our third comments are focused on DOER's most recent rules for solar projects on agricultural land and its inclusion of performance standards in the emergency regulations filed on June 5, 2017. 225 CMR 20.00.

We are pleased that DOER chose in the emergency regulations to include protections for all land currently in agricultural use—not only Prime Agricultural Farmland but also Statewide Important Soils, as defined by NRCS, 7 C.F.R. § 657.5(c), and as we discussed in our October Comments—while not enforcing a blanket ban on solar development on Prime Agricultural Farmland. By limiting Category 1 Agricultural incentive eligibility to commercial and non-commercial solar units sized to meet no more than 200 percent of the farm's annual operation load, 225 CMR 20.05(5)(e)(1)(a)(iii), or to Agricultural Solar Tariff Generation Units—dual-use solar sites with a capacity no greater than 1 MW (about 7 acres of land) and managed according to best practices, 225 CMR 20.06(1)(d)—the emergency regulations powerfully limit this threat to land conservation and agricultural communities without prohibiting necessary renewable energy development in the Commonwealth. We commend DOER, too, for providing its highest Compensation Rate Adder Value of \$0.06/kWh to these Agricultural Solar Tariff Generation Units, 225 CMR 20.07(4)(a), making them not only economically feasible but attractive to farmers who might otherwise be tempted to convert or lease larger portions of their land to

¹ See DANIEL KANE, NAT. SUST. AGRIC. COALITION, CARBON SEQUESTRATION POTENTIAL ON AGRICULTURAL LANDS: A REVIEW OF CURRENT SCIENCE AND AVAILABLE PRACTICES 3, 11–17, 21 (2015), <http://bit.ly/1Nj2kZ0>; JACK KITTREDGE, NE. ORGANIC FARMING ASS'N/MASS., SOIL CARBON RESTORATION: CAN BIOLOGY DO THE JOB? (2015), <http://bit.ly/1fv3BS4>.

² See U.S. DEP'T OF AGRIC., AC-12-A-51, 2012 CENSUS OF AGRICULTURE: UNITED STATES SUMMARY AND STATE DATA 248, table 1 (2014), <http://bit.ly/2cb73pl>; BRIAN DONAHUE ET AL., A NEW ENGLAND FOOD VISION: HEALTHY FOOD FOR ALL, SUSTAINABLE FARMING AND FISHING, THRIVING COMMUNITIES 8 (2014), <http://bit.ly/1Fontgc>.

³ See *Summary of Solutions by Overall Rank*, PROJECT DRAWDOWN, <http://bit.ly/2sa72s7> (last visited Jul. 10, 2017).

ground-mounted solar or other development. We recognize and agree that farmland is a precious resource and not the first place to turn for siting solar or other renewable energy generation units. However, given that solar development is already occurring on farmland and that farmers subsist on increasingly narrow margins, we support this approach as a way to support farmers seeking extra income while still protecting farmland from large-scale solar installations that would significantly compete with existing food production at a given site.

We are also pleased that the emergency regulations' Category 3 Land Use provision sets an upper limit on the capacity of ground-mounted solar developments not eligible for Category 1 incentives, 225 CMR 20.05(5)(e)(3), and that any such development with a capacity of more than 0.5 MW must meet Performance Standards that include no stripping of soils, no permanent footings, no concrete or asphalt in the mounting area, and maintained vegetative cover, 225 CMR 20.05(5)(e)(5). These limits and standards will help to ensure the continued, long-term agricultural use and value of farmland in Massachusetts.

We are concerned, however, that though Category 3 designation and the Performance Standards limit the threat of solar development to Massachusetts farmland generally, these protections do not sufficiently limit the size or kind of developments on farmland as distinct from other types of land, nor do they preference development on those other sites rather than on farmland. The provisions for Category 1 Agricultural designation and Agricultural Solar Tariff Generation Units discussed above specifically provide for limited-scale and dual-use solar development on farmland, but this may drive developers instead to create Category 3 units and take land out of agricultural use entirely. Under the emergency regulations, Category 3 developments may be as large as 5 MW—approximately 35 acres—on any kind of land, including Prime Agricultural Farmland. While the Performance Standards prohibit some of the worst practices for siting ground-mounted solar, developments of this size could quickly remove much of the Commonwealth's remaining farmland from production for the life of the solar panels, up to thirty years. Furthermore, while it may be technically possible to return the land to production after this time, the Performance Standards do not require that solar developers create a decommissioning plan to do so or specify who will be responsible for decommissioning the site. Both Prime Agricultural Farmland and Statewide Important Soils, on which a great deal of Massachusetts agriculture occurs, are thus threatened even by the 5 MW upper limit and current Performance Standards on Category 3 installations.

To remedy this problem, we recommend adding parameters to the Category 3 Land Use provision that lower this 5 MW restriction when such developments are sited on land currently in agricultural use. This would allow for the possibility of commercial solar projects on current farmland while limiting the Commonwealth's ongoing loss of productive farmland to development. Similar to the Special Provisions for Agricultural Solar Tariff Generation Units, 225 CMR 20.06(1)(d), we also recommend that the Performance Standards require panels installed on any agricultural land to be raised to allow continued cultivation or grazing, or permitting such dual use installations to reach the full Category 3 5 MW capacity, thus

incentivizing landowners to simultaneously pursue Massachusetts' twin goals of renewable energy development and the continued viability of farming in the Commonwealth. Finally, we recommend that the Performance Standards be revised to require siting solar panels on marginal land and buffer zones to the greatest extent possible—though not to the point of clearing additional trees—before placing them directly on farmland. By including this factor in the required standards compliance certification, Massachusetts could reduce the amount of productive farmland lost to solar development without decreasing the total amount of solar energy incentivized and generated under the SMART program.

In addition, DOER should require the approval of a conservation restriction (CR) or agricultural preservation restriction (APR) for commercial solar projects on any agricultural land that receive an incentive through the SMART program. The CR or APR should be drafted to guarantee that, while solar development of a determined scale is permitted, farmland soils must be protected for future agricultural use during construction, operation, and decommissioning of the solar facility. The CR or APR should also guarantee that the land can be expected to be devoted to agricultural purposes at a level that satisfies the thresholds in M.G.L. c. 61A. And the CR or APR structure should allow for oversight to ensure that these terms are met over time. As noted in our June and October Comments, this approach wisely relies on existing CR and APR structures and programs as a means of ensuring that commercial solar on agricultural land is allowed only in a manner that is tailored to a particular site and protects both agricultural soils and the ongoing agricultural land use itself after the solar panels are out of use.

We greatly appreciate that DOER is taking measures to protect the long-term agricultural use and productivity of farmland in Massachusetts. We now ask DOER to take another look and further refine its emergency regulations to ensure that its well-intentioned emergency regulations do not have the unintended consequence of pushing landowners toward large-scale, commercial, and solar-only development on farmland in lieu of more farm-friendly, dual use projects. Protecting current agricultural land is extremely important to the viability of farming in the Commonwealth.

Thank you for your consideration of these comments.

Sincerely,



Rafael Mares
Vice President and Program Director
Healthy Communities and Environmental Justice
Conservation Law Foundation