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BY ELECTRONIC MAIL

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Re: Agriculture and Farmland in Next Solar Incentive

Dear Ms. Kelly,

Thank you for the opportunity to provide comments in response to DOER's "straw proposal" regarding the next solar incentive under Chapter 75 of the Acts of 2016, and for the opportunity to participate in working group discussions. American Farmland Trust (AFT) is a national organization founded in 1980 and dedicated to protecting farmland, keeping farmers on the land, and promoting sound farming practices. As AFT has previously suggested, the next solar incentive program represents an opportunity to innovate at the intersection of solar, agricultural and land conservation policy to achieve 1) enhanced renewable energy production; 2) additional permanent farmland protection; and 3) agricultural economic development. Several elements of the straw proposal make steps in this direction.

AFT recognizes and supports the productive discussions that have taken place regarding **appropriate provisions for on-farm energy generation in support of farm operations**, including on APR farms in a manner consistent with MDAR's existing APR review and approval process. Farm businesses should be able to participate in off-setting their electricity usage through solar on an equal footing with other businesses. Given year-to-year fluctuations in farm usage, solar output, net-metering uncertainty, financing considerations and modest allowances for growth in on-farm electricity demand, AFT supports reducing or eliminating site or land-use restrictions for on-farm photovoltaic installations with a capacity up to 125% of the farm's annual average electricity consumption, with appropriate soil protection standards for impacted prime farmland (discussed below).

**AFT also supports the principle that permanently-protected land should be off-limits for the solar incentive except in very limited, special circumstances.** However, where solar is permitted within the existing restrictions and can be implemented without the need for any amendment or release of those restrictions, as in the case with appropriately-approved on-farm energy generation on APR farms, it should be eligible for a waiver from the general ban on participation in the solar incentive. Several similar limited exceptions have been explored in recent

working group discussions, and AFT supports allowing the Secretary of EEA to grant such special exceptions.

**AFT acknowledges and applauds the “adder” proposed for “dual use” agricultural/solar canopies.** This “adder” should serve as an incentive to develop more innovative and less intrusive solar facilities that can support the Commonwealth’s renewable energy goals without converting land out of agricultural use. To achieve this goal, the “adder” should be available to all appropriately-designed facilities sited on agricultural land, not only those impacting prime and statewide important land. However, wherever the “adder” is used, the facility should be subject to the same enforceable soil protection, minimum agricultural compatibility and minimum agricultural use standards as currently under discussion for facilities impacting prime and statewide important farmland. Such standards will help ensure that the additional incentive provided by the “adder” achieves its policy goals.

**Regarding prime and statewide important farmland,** AFT applauds the high importance that DOER has placed on **ensuring that state-sponsored solar incentives do not lead to the destruction of these valuable natural resources or conversion out of agricultural use** by proposing that projects sited on these soils be disqualified from receiving incentives. Today, the vast majority of these soils have been converted to housing, roads, or commercial development; only 125,500 acres of prime farmland remain in agricultural use according to the NRCS National Resources Inventory (NRI),<sup>1</sup> representing just 2.4% of the state’s land area and less than 8% of the 1,611,780 acres of prime farmland soils originally mapped by NRCS in Massachusetts.<sup>2</sup> Another 98,700 acres of prime farmland soils remain under forest cover, but the rest is lost for agricultural use. While the current acreage of undeveloped statewide important and unique soils is not readily available, data for the total acreage of crop and pasture land vary between the Census of Agriculture and the NRI, but range from 223,023 acres (Census of Agriculture) to 367,500 acres (NRI). It is highly probable that the majority of the active agricultural crop and pasture land in Massachusetts is either statewide important or unique.

Because of this importance, Massachusetts policy has long identified prime, statewide important and unique farmland as deserving special protection, particularly through the APR program, Executive Order 193, and in the review thresholds for the Massachusetts Environmental Policy Act at Act at 301 CMR 11.03(1)(b)(4). However, AFT also recognizes that landowners of unprotected prime and statewide important farmland who seek to recoup greater monetization of their property may well have other development alternatives that would permanently destroy these soils for future agricultural use. Rather than withhold solar as a less-damaging option, AFT supports limited provisions to condition access to the solar incentive on continued agricultural use concurrent with photovoltaic electricity generation. This approach is consistent with existing policy

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<sup>1</sup> [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcseprd396218.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd396218.pdf)

<sup>2</sup> USDA-NRCS, “Massachusetts State Soil Survey Legend, Prime Farmland Soil Classification,” available from [http://www.nrcs.usda.gov/wps/PA\\_NRCSCconsumption/download?cid=nrcseprd382009&ext=pdf](http://www.nrcs.usda.gov/wps/PA_NRCSCconsumption/download?cid=nrcseprd382009&ext=pdf).

frameworks related to the conversion of farmland if the solar incentive can help the farmland remain in active agricultural use without permanent damage to the soils. AFT hopes that by supporting and encouraging this type of dual use, similar outcomes may be achieved on other agricultural land that may also be at risk for increased solar development because it is not mapped as prime or statewide important.

There are certainly risks to this approach; performance standards must be robust and enforceable. While discussions about the details of this process are ongoing, several key principles are clear.

**Soil protection standards** must ensure that construction, operation and decommissioning preserve the agricultural productivity of soils impacted by solar PV development by requiring the installation and removal of all equipment and supporting structures in a manner that minimizes disturbance, mixing, inversion and compaction of soils, prohibiting the removal of soils from the site; and requiring that grading and earthmoving work be performed to a standard not less protective of agricultural productivity than the USDA-NRCS conservation practice standards for land smoothing and precision land forming.

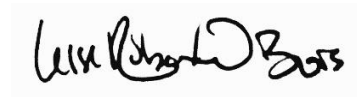
**Minimum agricultural compatibility standards** must ensure that solar PV facilities on farmland are actually usable for productive agriculture. At a minimum, the solar incentive regulation should require: no less than 4 feet of vertical clearance from solar panels to grade; the protection of all wiring and hazardous electrical components from contact by livestock; a minimum burial depth of 2 feet below grade for all buried conduit in order to allow shallow tillage for crop cultivation and vegetation reseeding; and reasonable provisions for agricultural use in plans, leases, and contracts for the PV solar facility.

**Minimum agricultural use standards** must require that “dual use” photovoltaic facilities are actually maintained in productive agricultural use. The eligibility requirements for Chapter 61A farm property tax assessment include long-established and reasonable minimum standards for sales of agricultural products and other farm activities in section 3, and AFT recommends adopting these as a minimum threshold. However, where Chapter 61A requires a minimum of 5 acres to qualify for farm property taxation, some dual-use solar/agricultural facilities may involve less than 5 acres; a flat \$500/year minimum sales threshold should apply to these smaller facilities.

Most importantly, the performance of the facility to **these standards must be enforceable**. AFT has previously suggested that an appropriately-worded agricultural preservation restriction, agricultural use covenant or conservation restriction could be approved through existing EEA processes to ensure compliance. If this is too procedurally difficult or otherwise untenable, AFT suggests that a performance bond calculated based on the value of the incentive or MDAR’s current “Agricultural Lands Mitigation Policy,” whichever is greater, could provide a viable alternative assurance mechanism, provided that the proceeds are dedicated to funding APR acquisition elsewhere in the state. Regardless of the mechanism, the enforceability of compliance with these policy objectives is an absolute necessity if any large-scale solar development is to be permitted on prime and statewide important farmland.

Thank you for the opportunity to provide comments on this important policy. American Farmland Trust will continue to engage with our colleagues in conservation and agriculture around this issue, and is eager to participate in the policy development process. We look forward to working together to support and protect Massachusetts' farms and farmland.

Sincerely,

A handwritten signature in black ink, appearing to read "Jesse Robertson-DuBois". The signature is written in a cursive, flowing style.

Jesse Robertson-DuBois  
New England Director  
American Farmland Trust

Cc: Commissioner John Lebeaux, MDAR