From:	Fred Beddall
To:	SMART, DOER (ENE)
Subject:	400 MW Review Public Comments
Date:	Tuesday, September 24, 2019 10:09:38 AM

Hello Department of Energy Resources,

The "SMART" program has failed in its efforts to direct solar development to already developed sites. Part of this failure is due to the rushed nature of the implementation of the program, including this so-called "emergency" regulatory revision. When you are designing a program with 20 year impacts, it makes sense to take the time to do it right.

It was remarked (by a solar developer) at the recent Amherst hearing that the adders and subtractors are essentially irrelevant when compared to the building code costs associated with placing electrical equipment on an occupied building. This is just one example of the ill-considered structure of the SMART incentives.

It was also noted that DOER does not measure the impact of its program on land use and has no record of the acres of forests or farmland cleared/converted under SMART. (This assertion by DOER appears to have been an untruth; it later turned out that DOER is, in fact, tracking this data. This secrecy is a good way to undermine public trust.) Without measurement, how can we judge the effectiveness of the policies?

SMART is, in effect, one of the most significant land use programs ever adopted by the State of Massachusetts, one with the power to override local land use controls, and reverse decades of previous state policies such as Chapter **61** property tax reductions -- a policy that was intended to promote long-term forest and farmland conservation.

SUGGESTION: Any project which revokes Chapter **61** tax status must be a) assigned subtractors and b) tabulated if the project is carried forth despite forgoing the Chapter **61** tax status so the cumulative acreage of such removals is known.

Comment 2: As a full-time farmer, I am especially skeptical of the "Dual Use" solar incentives. If this is any indication, MDAR has lost its way as an advocate for farming. I have worked in farming for more than 20 years and never encountered a crop that benefited from 50% shade. (Perhaps shade tobacco was such a crop.) Second, the practical impacts of operating machinery amid an obstacle course of metal poles are enormous. For example, whole-field plowing is necessary for most crops, even long term perennials, at some point in their establishment or renovation. Third, a very large proportion of Massachusetts farmland is leased. The owner is not the farmer. The owner has separate and different financial incentives. If the owner receives the benefit from removing ag land for solar, all the actual farmer gets is a reduced land base and higher land costs.

What MDAR should be promoting is large grants and subsidies for composting, cover cropping, and long-term fallows as measures to increase soil carbon storage (ie, increase the soil organic matter). These measures are off-the-shelf techniques which improve soil structure, nutrient retention and availability, and soil drainage (ie, climate resiliency) but are not widely practiced because they cost money and most farmers are under too much financial pressure to do more than a token winter cover to prevent winter erosion. Moreover as the land base keeps shrinking, there is less possibility to include long-term fallows into a crop rotation, and more pressure to crank every available dollar of production out of the remaining land base.

Farm soils are uniquely suited to rapidly incorporate organic matter through the right practices, owing to the wide-spread availability of the necessary machinery on farms, and the fact that many remaining Massachusetts farms occupy soils which are depleted below their potential soil organic matter content.

The place for dual use solar is over the parking lots which occupy tens of thousands of acres that can have no other positive contribution to make to our climate problem.

SUGGESTION: DOER and MDAR finance "Farm Soil Carbon Sequestration" program and dis-incentivize any further loss of farmland for solar.

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