

John H. Tourtelotte
Rivermoor Energy
275 Grove Street
Suite 2-400
Newton, MA 02466

October 24, 2016

Michael Judge
Deputy Director
MA DOER
100 Cambridge Street
Boston, MA

***RE: Solar Energy Land Use & Siting Considerations in Response to
MA DOER's "Next Generation Solar Incentive Straw Proposal"***

Dear Mr. Judge,

Thank you for the diligent and committed work by the DOER and its consultants on the straw proposal. Our team would like to specifically comment to the DOER on the draft land use guidelines which were advanced in the straw proposal. We believe that these guidelines, while admirable in their intention, would not be good policy. In fact, we believe that many of these guidelines would overlap and, in some cases, both contradict and cause interpretational confusion with existing Massachusetts, MA DEP, and local-level conservation commission regulation, guidelines and policy.

Additionally, many of the straw proposal land use guidelines would effectively prohibit solar uses and thereby encourage the development of much more impactful and intensive commercial real estate development and large-scale residential planned community development projects for the benefit of property owners seeking to create financial value from their investment in developable land properties. Also, whereas a solar development is a 20-25 year asset, a commercial real estate or residential development could be a 100+ year asset (with much more environmental impact, traffic and a high percentage of impervious paved area).

Please find our summary comments below:

- **Use of GIS Mapping Layers:** DOER's suggestion to use GIS created map layers to establish locations that will be unable to receive state incentives to promote solar is misguided. These mapping resources were developed to provide guidance about conditions and uses of land. In some cases, the map layers establish very specific categories that are unique and identifiable for a particular parcel. In other cases, they establish general categories based on data developed for entirely unrelated purposes, and which categorize land based on very broad based data that may have nothing to do with actual conditions at that location. The problem with these maps as being the basis for restricting solar development is that the maps are not nearly as precise as required, are extremely over inclusive, and in many cases are only generalized estimations of boundaries. Even if a mechanism is develop for review and potential approval of exceptions to allow installation in specific land areas, the mere uncertainty and extra steps necessary to secure such approval will likely eliminate these areas from consideration.

- For example:
 - **Prime Farmland Soils** - this is a classification based on soil types, and implies nothing about whether the land is ever going to be used for farming. For example, many suburban homes are on "farmland of statewide importance". These homes have nothing to do with farming, and never will. Even if the restriction is limited to Prime Farmland Soils, that has nothing to do with what is actually likely farmland, but again is a very general soil characterization. Prohibiting solar on all land that could potentially support growing things is a policy overreach and could hurt farms that would benefit from adding solar - and saying that farms that want solar could be exempt will not work because the financial margins are always going to be so tight that putting up one more layer of uncertainty will doom most projects - even those deemed beneficial to a particular farm.
 - **Prime Forest Land** - this is a similar issue in terms of the question "what is Prime Forest Land"? A generic definition based on soils, presence of forest in the past as evidence of ability to support tree growth currently, etc., that will capture and restrict solar development on land that is privately owned and available for all sorts of other commercial development would be a mistake. MA DPU is not the agency or forum to decide that no trees should be cut for a solar facility. If an area of forest is important in and of itself that development should be restricted, there are ways to accomplish that (Chapter 61, conservation restrictions, municipal or state acquisition, municipal land disturbance permits). Preventing the siting of solar facilities based on such a general categorization of land will not prevent development, only solar development.
 - In addition, we would advise that DOER should be cautious about accepting these maps as definitive for what is "farmland" and what is "forest". These maps, in many cases, are only based on soil conditions, but are then used by interested parties to extract concessions from developers. While everyone loves farms, let's make sure that what is being protected is actually farmland, and that who is being protected are farmers, and not just special interests.
 - **Designated Habitat, and Core Habitat** are areas that have been mapped as areas deemed critical for ensuring ecological diversity and preserving native species. These are the "known geographical even of habitat", which by definition is an estimation and approximation of habitat, and will eliminate vast areas that may have not particular importance of such preservation.
 - Areas that are on the **Inventory of Historic or Archaeological** sites is too broad. The "Inventory" includes hundreds of thousands of sites for which filings have been made, some simply to impede development.
 - Restrictions on areas of **Wetland soils or other wetland areas** is an unnecessary exclusion zone. All solar projects already have to receive

wetlands approval for any land disturbance what could affect wetland resources, and so establishing an outright prohibition on a separate set of maps is unnecessary and illogical.

- **Article 97 Land** - Why would former Article 97 land be included? If parkland has received the MA Legislature's votes to allow another use, why should a prohibition on solar use be created? And, if land needs votes of both houses of the Legislature to be used for other purposes, why does EEA/DOER need a further restriction that trumps the votes of the Legislature?

- **Other Practical Considerations for the MA DOER:**

- **Overall Land Use Framework:** Solar projects are subject to the same levels of state environmental and land use laws, regulations and prohibitions as other forms of commercial real estate development. MA has amongst the strictest standards in the US. Why do we need to create another level of more restrictive land use provisions than is currently in place? Should solar face more restrictions than residential home development, one of the largest uses threatening former farmlands and wooded areas? The same can be said of commercial distribution centers, warehouses, grocery stores, etc. which have significant impervious paved areas. All of these commercial uses have superior economic value than solar and can therefore afford to pay more per acre of land.
- **Wetlands:** Solar projects are already subject to DEP, MEPA, and local Conservation Commission guidelines and regulations, including setbacks from wetlands and environmentally sensitive land areas.
- **Endangered Species and Sensitive Environmental Areas:** Already managed / controlled by MA Natural Heritage, Mass Wildlife, MEPA, Chapter 91 and local Conservation Commissions.
- **Farmland:** Already protected by multiple state agencies, state law and local conservation commissions. Farmland is most threatened by single family home development and subdivisions as well as commercial real estate development. Additionally, conservation easements, that are commonly used to protect farmland, already prohibit development of the land.
- **Forested areas:** Same as above - protected by multiple state agencies and environmental law. MEPA, state DEP and local conservation commissions govern land use in forested areas.
- **Historic Areas:** Already protected by MA Historic Commission.
- **Brownfields and Landfills -- Over-weighted by DOER Solar Incentives:** Our team has significant successful experience developing solar assets on such land areas and we are advocates for brownfield re-use. That being said, there is a limit to the amount of projects that can be practically and economically developed on such land areas. *We have some concern that state policy has evolved to specify these areas while making it more difficult to develop larger solar assets on corporate campuses, manufacturing properties, higher educational campuses, etc. Furthermore, the previous "SREC 2" incentives were heavily weighted to encourage municipal projects. We feel that municipal and governmental (cities and towns) projects have become overweighed as a percentage of total projects*

in the state to the detriment of commercial, manufacturing, MLP, and institutional segments of the Massachusetts economy.

Thank you for your further consideration of the existing regulatory and policy framework governing a range of commercial and residential real development uses in Massachusetts and how to best encourage and manage solar development, land use and incentives within this context.

Sincerely,

John H. Tourtelotte