



CITIZENS
ENERGY
CORPORATION
a non-profit energy company

October 28, 2016

Commissioner Judith Judson
Renewable Energy Director Michael Judge
Massachusetts Department of Energy Resources
100 Cambridge St, Suite 1020
Boston, MA 02114

Re: Successor Solar Incentive Program Straw Proposal

Dear Commissioner Judson and Director Judge:

Citizens Energy Corporation would like to thank the Department of Energy Resources for their leadership and continued support of the solar industry. Citizens Energy is a Boston-based non-profit energy company founded in 1979 by Joseph P. Kennedy II. Over the past 10 years, Citizens has built a large portfolio of solar projects in Massachusetts (and other states) – not only developing the projects, but also becoming the long-term owner and operator of all the projects we develop. Our solar business is an example of one of the many great outcomes of the Solar Carve Out program, having created hundreds of jobs through our solar activities across the Commonwealth. As a result of the Commonwealth's solar programs, Citizens is a leading developer and owner of many different types of solar projects in Massachusetts including landfills, superfunds, greenfields, and municipal utility territories.

Citizens would like to take this opportunity to provide comments about the straw proposal, namely about the troubling aspects of the proposed siting constraints.

SITING CONCERNS

The DOER's straw proposal presents siting criteria intended to ensure the responsible siting of large, ground mounted solar projects. However, we believe that this siting criteria is too broad in its reach and should be eliminated.

The attachment to this letter is a map that shows how much land the proposed siting criteria actually restricts – approximately 81% of all acreage in the Commonwealth. (Note this 81% does not include land under Chapter 61 designation or archaeological sites listed in the State Register of Historic Places or Inventory of Historic and Archaeological Assets of the Commonwealth as these datasets were not readily available.) Further, of the remaining 19% of unrestricted, developable area, approximately 9% generally falls within urban areas likely unsuitable for solar, leaving only 10% of land area in Massachusetts suitable for solar development under these restrictions. This map is a simple way of showing why the siting criteria should be eliminated.

Many of the siting restrictions listed are already addressed in the permitting process of a project. There are state and local agencies that have jurisdiction over most of these conditions and

oftentimes impose penalties for projects in these areas (a change of use under Chapter 61 for example). We believe these state and local reviews of the specifics of each project are sufficient to ensure responsible siting of large, ground mounted solar projects in the Commonwealth.

Additionally, should these siting restrictions be implemented by the DOER, many landfills and brownfield sites - lands currently incentivized through a proposed location-based adder by the DOER – would become ineligible for solar development. We believe, and it is generally supported by the public, that siting solar on landfills is a great re-use of an environmentally degraded property and siting restrictions should not limit landfill/brownfield solar development.

In our comments below on specific siting concerns, we lay forth the reasons and include, within each section, a solution to each issue raised in the straw proposal's siting criteria. We believe that public policy would not be served by imposing these new siting restrictions.

a. MASSDEP WETLANDS

Citizens agrees that wetlands are not an appropriate location for the siting of solar projects. However, 310 CMR 10.00, "Wetlands Protection Act" is already responsible for the protection of wetlands and provides the minimum requirements for activities within and around wetlands. Further, individual communities can choose to adopt more stringent wetlands protections by-laws, and many do. Additional DOER restrictions would be duplicative and an unnecessary burden to solar, as well as to the DOER. Citizens is concerned that additional, more detailed reviews will bog down the DOER and the process of qualification. Under the Solar Carve Out program, a solar project has to provide all non-ministerial permits, which includes wetlands permits, to the DOER.

Solution: DOER should eliminate the wetlands siting restriction, but continue to require all non-ministerial permits, such as wetlands permits, to ensure solar is being developed in a responsible manner. If DOER chooses to implement wetlands siting restrictions, we recommend that the DOER allow solar in wetland buffers, so long as it complies with the local conservation commissions authority.

b. PRIME FARMLAND SOILS AND PRIME FOREST LAND

These Geographic Information System (GIS) datasets that classify Prime Farmland and Prime Forest Land in Massachusetts are not robust, and were developed as academic pursuits, not meant to be used as regulatory tools or for project siting. Furthermore, individual municipalities have siting and land use regulatory authority. Additional DOER restrictions would be duplicative and an unnecessary burden to the DOER. Citizens is concerned that additional more detailed reviews will bog down the DOER and the process for qualification. Many municipalities have already imposed more stringent siting restrictions on solar, many of whom adopted the DOER's model solar by-law.

i. Prime Forest Land

Upon investigation into the Prime Forest Land GIS dataset, it was created as an academic pursuit to digitally classify potential average timber productivity. It is understood that environmental groups made the recommendation to use this dataset to restrict solar in an attempt to prioritize conservation land. However, with a better understanding of the data, it is clear conservation efforts were not the intent of the classification.

ii. Prime Farmland Soils

In regard to the Prime Farmland Soils siting criteria, we feel that DOER is making an inaccurate assumption that solar is bad for farmland or farmers. We understand that in some cases, there has been backlash about solar on farm fields. However, we believe this is primarily from the "Not In My Backyard" (NIMBY) movement, and not from farmers or individuals with an agricultural preservation agenda. We have seen farmers turn to solar as an alternative to having to sell off the land for other types of development such as housing. Solar is a temporary use, and as such, farmers can keep the land, while restoring soil quality by letting it lay fallow, as well as provide a much needed diversified source of revenue in a challenging agricultural economic environment.

iii. GIS Soils Metadata

Both the Prime Forest Land and Prime Farmland Soils are derived from the same soils dataset. A review of the soils dataset exposes a paragraph on "Limitations on Use". This shows that DOER's proposed use of this GIS data is expressly against the datasets' design. It reads:

This data set is not designed for use as a primary regulatory tool in permitting or siting decisions, but may be used as a reference source. This is public information and may be interpreted by organizations, agencies, units of government, or others based on needs; however, they are responsible for the appropriate application. Federal, State, or local regulatory bodies are not to reassign to the Natural Resources Conservation Service any authority for the decisions that they make. The Natural Resources Conservation Service will not perform any evaluations of these maps for purposes related solely to State or local regulatory programs.

The paragraph that follows shows that the methodologies of how this dataset was derived are such that it is useful for desktop analysis, but can easily be over-generalized and misinterpreted, and thus, is not an appropriate basis for siting or permitting restrictions.

Photographic or digital enlargement of these maps to scales greater than at which they were originally mapped can cause misinterpretation of the data. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale. The depicted soil boundaries, interpretations, and analysis derived from them do not eliminate the need for onsite sampling, testing, and detailed study of specific sites for intensive uses. Thus, these data and their interpretations are intended for planning purposes only. Digital data files are periodically updated. Files are dated, and users are responsible for obtaining the latest version of the data.

Solution: Bearing in mind the above dataset disclosures and taking into consideration the examples presented, we recommend the DOER remove the Prime Farmland Soils and Prime Forestland categories from the siting criteria, but continue to require all non-ministerial permits, such as local planning or zoning board permits, to ensure solar is being developed in a responsible manner. If the DOER does impose a restriction, we suggest that the DOER allow for solar so long as the long-term lease contracts include a provision that the solar owner must remove the project and restore the site at the end of its useful life. This should satisfy the environmental groups who are concerned about the long-term impacts.

c. BIOMAP2 CORE HABITAT AND CRITICAL NATURAL LANDSCAPE

The BioMap2 data layers are other GIS datasets, similar to the Prime Farm and Forest Land datasets, which were not developed to be used as regulatory tools. The datasets are not field-verified, but rather developed through desktop analyses that utilize various modeling assumptions. The datasets were designed to help conservationists plan where to focus their efforts. However, conservationists do not rely on these datasets alone when deciding what land is the most valuable from a conservation perspective. This is just one tool in their toolbox. As such, it's not an appropriate tool for DOER to use to determine which projects qualify or are restricted from solar development. In fact, the data specifically states the following usage limitations, which are not consistent with DOER's proposed use:

This datalayer is intended for conservation planning purposes only. It should not be used for regulatory purposes.

The data also states the following:

Please note that Core Habitat polygons were designed for use at a regional or town scale. For accurate portrayal, the data should be displayed at scales of less than 1:25,000 (e.g., 1:30,000).

The significance of this statement regarding scale is that the dataset is not accurate enough to site an individual piece of property. But rather, is only accurate for a town-level analysis.

Solution: We recommend that DOER remove the BioMap2 Core Habitat and Critical Natural Landscape datasets from siting restrictions as regulatory purposes are an inappropriate use of the datasets given the data is not based on field conditions and the scale is not detailed enough for the micro-siting efforts that solar development requires.

d. DESIGNATED PRIORITY HABITAT OF STATE-LISTED RARE SPECIES

While the intentions of the environmental groups to include this siting restriction are noble, it is not true that solar and rare species cannot successfully coexist. Further, state-listed rare species are already protected through the MGL c 131a, the Massachusetts Endangered Species Act (MESA) and 321 CMR 10.00. Additional DOER restrictions would be duplicative and an unnecessary burden to the DOER. Citizens Energy is concerned that additional, more detailed reviews will bog down the DOER and the process of qualification. Under the Solar Carve Out program, a solar project has to provide all non-ministerial permits, which include a Natural Heritage Endangered Species Program (NHESP) review to condition our site plan, construction, and operation.

Solution: We recommend that the DOER remove the Designated Priority Habitat of State-Listed Rare Species as a siting restriction, but continue to require all non-ministerial permits, such as NHESP, to ensure solar is being developed in a responsible manner. If DOER chooses to impose this siting restriction, we recommend that the DOER allow solar where NHESP provides conditions in order for the project to not result in a "take".

e. PERMANENTLY PROTECTED OPEN SPACE

The Open Space GIS dataset that represents the DOER's proposed siting restriction was not developed to be used as a regulatory tool, it was an attempt to include all protected open space lands in Massachusetts in one dataset to be used for statewide and regional planning purposes. As such, it is not appropriate to provide regulatory direction based on this dataset.

Additionally, the land that is classified as permanently protected in this dataset is already legally protected and recorded as such in a deed or other official document. A deed restriction can only be amended or removed through very specific legal actions be taken by the public, and often requires legislative action as well. As such, solar is already dis-incentivized to develop on these protected lands. Additional oversight and restrictions by the DOER would be duplicative and an unnecessary burden to the DOER.

Solution: We recommend that the DOER remove Permanently Protected Open Space as a siting restriction, understanding that lands falling into this classification already have protection through deeds or other official documents and, as such, there is no need for DOER to impose additional restrictions.

f. LAND DESIGNATED AS FOREST LAND UNDER CHAPTER 61

Chapter 61 is a tax incentive program. However, the penalty for removing the Chapter 61 designation is not great enough to discourage development, whether it be for solar, residential housing, or commercial/industrial development. Solar, unlike some other forms of development, is a responsible, passive, and temporary land use. It provides clean air by reduced dependency on dirtier forms of energy, it reduces economic dependency on out of state sources of energy, and it helps to mitigate climate change. It seems illogical to disallow solar development, but effectively allow for active and permanent land use such as residential housing, commercial businesses, or industrial development.

Additionally, the process for removing property from Chapter 61 goes through a well-defined, local process that allows for local review and even includes an option for the local authority to purchase the land if they so desire.

Further, it is over-reaching for the DOER to restrict former lands in Chapter 61. There are many reasons a property may have been removed from the program that do not include solar development.

Solution: Restricting Chapter 61 lands would be unfairly restricting solar development, but not other forms of development. As such, we recommend the DOER remove this restriction entirely.

g. ARCHAEOLOGICAL SITES

Citizens does not believe that Archaeological sites listed in the State Register of Historic Places or Inventory of Historic and Archaeological Assets of the Commonwealth should be restricted by the DOER. Currently any impacts to historic and archaeological resources are regulated pursuant to Section 106 of the National Historic Preservation Act and MGL Chapter 9 Sections 26-27C. Development of solar on historically sensitive sites can be undertaken with a determination of no adverse effect from the Massachusetts Historical Commission (MHC), or if an adverse effect determination is made, through execution of a Memorandum of Agreement

with MHC. Frequently other stakeholders such as local historic commissions and Indian Tribes are also involved in review. The MHC review process and requirements for archaeological surveys and avoidance plans are comprehensive and strict. Additional oversight and restrictions by the DOER would be duplicative and an unnecessary burden to the DOER.

Solution: We recommend that the DOER remove Archaeological sites listed in the State Register of Historic Places or Inventory of Historic and Archaeological Assets of the Commonwealth as siting restrictions, understanding that any impacts to historic and archaeological resources are regulated under Section 106 of the National Historic Preservation Act and MGL Chapter 9 Section 26-27C.

CONCLUSION

Citizens Energy supports the DOER's efforts to responsibly site solar in Massachusetts. However, we believe that for the solar public policy to be effective, the siting restrictions should be removed as they are duplicative and already regulated by existing state and local processes. We are happy to provide additional insight or case studies if the DOER would find it useful.

Thank you for this opportunity to provide comment.

Sincerely,

A blue ink signature of Peter F. Smith, consisting of a stylized 'P' followed by a horizontal line and a small flourish.

Peter F. Smith
Chief Executive Officer

A blue ink signature of Brian Morrissey, featuring a large, flowing 'B' and 'M'.

Brian Morrissey
Managing Director, Solar

