TO: **Solar Siting Board**
Sitingboard.filing@mass.gov

FROM: Nancy Hazard
[redacted]

RE: Solar Siting comments

Thank you for your work and the opportunity to comment on **Solar Siting Criteria and Scoring.**

I have been a solar and sustainability advocate for over 40 years as a solar builder, a program director at the Northeast Sustainable Energy Association (NESEA), and a full-time volunteer of Greening Greenfield since 2007.

As such I recognize the need for carbon-free electricity and the huge role that nature plays in carbon sequestration and supporting life as we know it on our planet Earth, as well as the need to preserve agricultural land for food production.

Both the MA Solar siting study and the MA Audubon/Harvest Forest Study**, Growing Solar Protecting Nature (2023)** conclude that we can build almost all of the required solar needed on the built environment while preserving the key conservation land as classified by BioMap.

Following are my key comments on the Criteria and Scoring table.

1. **Scoring**: There must be a way to score land as "Cannot be used." I.e. that the score is less than Zero. See below RE comments on forests and BioMap areas.

2. **RE: Agricultural land**. PV is a valuable tool that can be used by the land owner to protect and "save" agricultural land rather than selling it. If sold we would likely permanently lose the land to agricultural use, and the soil would end up being beneath pavement or buildings, or be destroyed by mines or other activity.

Following are my specific comments on the Criteria and Scoring table.

1. **Carbon Sequestration and Storage**. Scoring forest land must be scored a ZERO, with NO exceptions.
2. **Biodiversity**. ALL BioMap areas, not just Core Habitat, should be scored as "cannot be used. Only disturbed areas outside the BioMap area should be given a score above zero. Agricultural land should be an exception as noted below.
3. **Agriculture protection potential**. Agricultural land can be a valuable place to install PV. Most agricultural land is open and has excellent access to sun, and I see putting PV on ag land as a tool that could make it financially possible for the owner of the land to keep the land in agriculture, rather than selling the land to a developer, and being lost forever under pavement or buildings, or being destroyed by extractive activities.

   Europe has much experience and success with what they call Agri-PV. They have also developed policies that ensure minimal reduction of agriculture output, as well as potential damage to the land that should be explored. Here are two resources:

Solar installations bear fruit for Netherlands Agri-PV – 5-minute video, 2024
The video shows Agri-PV in use in the Netherlands to grow fruit (raspberries, strawberries and apples and pears). Farmers in Netherlands, France &Germany talk about the challenges of climate change and how Agri-PV has increased resilience to their business and food production by protecting crops, while also generating zero-carbon electricity. Farmers feel that crop a reduction of 20% in agricultural production is a good tradeoff because the Agri-PV protect crops from damage by hail, rain, heat and cold.

Agrivoltaics and landscape change: First evidence from built cases in the Netherlands
This 2024 scientific analyzes landscape changes in various landscape types, and societal acceptance. The study concludes that *"Agrivoltaics is a promising solution for renewable energy provision…"* and that it is important, on a policy level, of establishing site selection and design criteria. They also note "In the Netherlands, among other countries, recent policy gives preference to agrivoltaics over conventional solar power plants."

RE Aesthetics: Ag land has a long history of being covered by greenhouses, or in the Pioneer Valley by shade structures to enable farmers to grown shad-grown tobacco. Today, many "high tunnels" are being installed, which protect crops, but have the downside that they are also generating agricultural plastic waste! Similarly, PV is a tool farmers can use to protect their crops.

4. **Climate Resilience**. I look forward to scoring to be announced
5. **Development potential (generation projects).** The 5-mile distance from the grid for a Capital Investment Project (CIP) feels too great for our Northeast landscape, unless it is along an existing road. If a NEW road needs to be built to access the site and interconnection, it should be VERY short. Even one mile feels too long.
6. **Development potential (utility infrastructure).** Scoring approach seems reasonable.
7. **Social and environmental burdens**. Nice to see this. I'd like to see more detail.
8. **Social and environmental benefits**.
   As for list of projects that could add up to 2.5 additional points, I would like to see more specific scores, and/or language changed.
   a. 10 points for brownfields please
   b. 10 points for previously disturbed lands please
   c. Expected habitat benefits (as confirmed by Mass Wildlife). This can be tricky. Please rewrite to read "Expected benefits that do not involve clearcutting a forest"
   d. Improves outdoor air quality – good idea
   e. Creates expanded recreational opportunities – good idea
   f. Creates local jobs – please revise to read: "Create both short-term and long-term local jobs."

Thank you again for your work.
I look forward to the next iteration of Criteria and Scoring.