To the Massachusetts Energy Siting Facilities Board, the Department of Energy Resources, and the Massachusetts Green Communities Division,

Please accept my comments on the Model Bylaws for Solar and Battery Storage Energy Systems ( BESS)

My comments are bolded.

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**Draft Model Bylaw for Solar**

1.0 Purpose

The purpose of this bylaw is to promote the development and installation of new Solar Photovoltaic Installations by providing standards for the placement, design, construction, operation, monitoring, modification and removal of such installations that address public safety, minimize impacts on scenic, natural and historic resources and to provide adequate financial assurance for the eventual decommissioning of such installations.

**Comment: The bylaws should emphasize and ensure that impacts on the environment  are to be avoided, not just minimized. Mitigation should always be avoided. We know that there is huge potential for  solar that can be on the built environment. Those resources need to be exhausted first, before we damage the rest of our valuable and irreplaceable lands and waters.**

3.1 Solar Photovoltaic Installation Classes

Note - Municipalities may want to consider allowing ground-mounted solar with a Special Permit outside the overlay district and allowing ground-mounted solar with SPR in the overlay district, and/or ensuring that the overlay district encompasses a reasonably large percentage of the municipality’s land.

We also note that the model use table above does not prohibit solar facilities in any of the common zoning districts. Municipalities may wish to prohibit Primary Use solar in certain districts, but should be cautious to not exclude solar from a large portion of the Town’s land, based on the Tracer Lane II decision, 489 Mass. 775 (2022). An example of an area that a municipality may reasonably wish to exclude Primary Use solar from categorically might be a dense commercial district.

**Comment: EFSB and DOER need to say what encompassing "a reasonably large percentage of the municipality’s land" or "be cautious to not exclude solar from a large portion of the Town’s land" means.** **There are no state regulations, laws or case law that are explicit or meaningful to define this idea. leaving the municipalities guessing, and arbitrary decisions to be made by state level agencies .**

6.2 Required Documents

**Comment: The list of required documents is much more extensive than any language related to actual standards for the items the  list. A developer can  just make the list. But how much does that matter when what is on the list will barely, if at all affect, the project's "viability."**

**For example** "xvi. Trees with a diameter at breast height (DBH) of 20 inches or greater within the project site that will be removed as part of the project". **What does it matter to list the number of trees that will be removed when there is little to nothing in your proposals where that number of trees will matter. Same for "**xx. Locations of local or National Historic districts and properties;". **We are seeing now that Indigenous sites are not being adequately located, that important sites are being routinely destroyed, and if they are located, the avoidance of such sites is minimal. It will be left up to state agencies to decide if any historical site gets special treatment. This list makes it look as though these features are being valued and considered. They are not. They are simply listed. Towns should be deciding what is important and what needs to be protected.**

6.6 Dimension and Density Requirements  6.6.1 Setbacks

Note: These setback distances are suggested values. Varying setback distances may be appropriate. The municipality should evaluate what is appropriate for its land use goals. Municipalities should generally apply the same setbacks to solar developments as they do to other similarly situated project types. For example, if the setback in a commercial area for most buildings is 50 feet, that may be an appropriate setback for a solar facility in that district. In general, municipalities that are less densely developed may want larger setbacks than the ones outlined in this bylaw, while municipalities that are more densely developed may want smaller setbacks. Generally, setbacks should not exceed 75 feet.

**Comment: 75 feet is a very short distance in many situations. Towns should be able to create set backs that are appropriate for specific circumstances as they do now  for residential  commercial or industrial development.  A maximum of 75 feet should not be your recommendation.**

**6.8.2 Land Clearing and Soil Erosion**

Note: Some Massachusetts municipalities require habitat mitigation offsets for large-scale solar built on previously undeveloped land, requiring developers to conserve land in proportion to the land disturbed by the solar installation. The Massachusetts Attorney General’s Municipal Law Unit has approved mitigation ratios of 1:1 and has disapproved one instance of a 4:1 habitat mitigation ratio. Mitigation measures involving replacement of impacted resources (e.g., tree replacement, wetlands replacement, or habitat replacement) should adhere to a no net loss goal and at least a one-to-one replacement ratio of impacted land area. Such mitigation may be incorporated into a local bylaw, and/or included in a CBA**.**

**Comment: We should not be mitigating in the first place. Loss of resources cannot be replaced If mitigation is "required" the project should not be permitted. Or if the town is forced to allow a project it does not want, a 4:1 ratio habitat mitigation ratio is more than fair.**

Project owners and operators shall site and design their solar installation to avoid, minimize or, if impacts cannot be avoided or minimized, mitigate siting impacts and environmental and land use concerns to the greatest extent possible.

**Comment: The operating principal should be to "avoid." Mitigation is a poor choice for land clearing and soil erosion.  Soil and land cannot be replaced, so mitigation is a poor option in the vast majority of cases.**

**Final note: Municipalities should be able to reject projects that are incompatible with the town's character, values and history, as well as when there is clear damage to the environment, loss of real estate values, local negative health impacts, loss of productive farmland, loss of forested land, and negative impacts to drinking water and recreational opportunities, and loss of wildlife habitat and species moving freely in their habitats and migration ranges. These are all reasons to say "no."**

**Draft Model Bylaw for Battery Energy Storage Systems ( BESS)**

1.0 Purpose The purpose of this bylaw is to promote the development and installation of new Battery Energy Storage Systems (BESS) by providing standards for placement, design, construction, operation, monitoring, modification, and removal of such systems that address public safety, minimize the impacts on the scenic, natural and historic resources, and to provide adequate financial assurance for the eventual decommissioning of such installations.

**Comment: The purpose should not be to minimize impacts. It should be to ensure the highest  level of  protection of our natural resources, public health and safety, and wildlife.**

2.0 Definitions

 All tiers of BESS The facility must comply with the State’s Electrical Code (527 CMR. 12.00), the State’s Fire Code (527 CMR 1.00), and National Fire Protection Association (NFPA) 855 or subsequent standard.

**Comment: The towns should be allowed to create standards that are more protective of life and property then in these current codes. Massachusetts does not have enough experience with BESS to have adequate fire and electrical codes.**

Note: BESS with a capacity of 100 MWh or greater will be under the jurisdiction of the Energy Facilities Siting Board (EFSB)

**Comment: This is highly problematic. There are no clear standards being proposed to site >  100 MW BESS.What there is so far is the site suitability scoring that does not prohibit bad siting. It allows for developers to pay to mitigate. Local communities need to be able to have standards and bylaws stronger than state regulations and guidelines, just like for almost everything else such as local noise regulations, local air pollution regulations, public health regulations, and local wetlands bylaws. BESS should not reside in a separate legal world.**

3.0 Applicability

Educational Note: Existing Massachusetts law limits the local zoning restrictions that can be placed on solar and storage facilities. Massachusetts General Laws Chapter Chapter 40A,  Section 3, ninth paragraph, provides:  No zoning ordinance or by-law shall prohibit or unreasonably regulate the installation of solar energy systems or the building of structures that facilitate the collection of solar energy, except where necessary to protect the public health, safety, or welfare. The Attorney General’s Office (AGO) reviews all zoning bylaws for compliance with state law, including with M.G.L ch. 40A § 3.

MGL ch 40A section 3 is explicitly about solar. It is explicitly not about anything else, including BESS. And it should not be misapplied in this manner. There is no suggestion in any law or case law that directs a municipality to know " what is reasonable". This Education Note serves two purposes: to intimidate and confuse local officials,  and to  embolden developers to ignore legitimate local concerns. This overreach is an assault on the residents of Massachusetts.

3.1 BESS Installation Tiers

Notes: We also note that the model use table above does not prohibit BESS Installations in any of the common zoning districts. Municipalities may wish to prohibit Primary Use of BESS in certain districts but should be cautious not to exclude BESS from a large portion of the Municipality’s land, per the Tracer Lane II decision, 489 Mass. 775 (2022). An example of an area that a municipality may reasonably wish to exclude Primary Use BESS from categorically might be a dense commercial or residential district.

**Comment: Add into the tier the other option for any district - "N" for "no". And given that there is no understanding of what it means to "be cautious not to exclude BESS from a large portion of the Municipality’s land," this is language to intimidate residents and boards, adn embolden developers to have close to carte blanche for all aspects of their projects. The very few limitations for developers are to not site projects in Core Habitat, and whatever limits exist for their subsidies in the SMART regulations**.

6.2 Required Documents

B. Proof of notification the owners of record for all abutting properties and properties within 300 feet of the subject parcel’s boundary;

Note The proof of notification to abutters and property owners listed in Section B above complies with M.G.L. ch. 40A sec. 11, which requires mail notification of abutters and abutters to abutters within 300 feet when a public hearing is required during the review process for the proposed development. Municipalities may wish to extend to a greater distance to encourage more community engagement with the BESS development.

**Comment: Good for you note that municipalities may wish to extend the distances for more community engagement. Please change the language in the model bylaw to say that.**

The Site Plan Review Authority may waive document requirements as it deems appropriate.

**Comment: Make good bylaws that don't allow waivers.**

6.5 Emergency Response Plan

For all BESS Installations requiring Site Plan Review or a Special Permit, the proponent shall submit an Emergency Response Plan. The Emergency Response Plan shall be approved by the local fire department prior to system commissioning. A copy of the Emergency Response Plan shall be given to the local fire department and local fire code official. A permanent copy shall also be placed in an approved location to be accessible to facility personnel, fire code officials, and emergency responders. The Emergency Response Plan shall include the following information:

**Comment: The emergency response plans will be carried out by the communities. This is blatantly unfair, even if a developer pays a fee. The emergency plan activities and any loss of land , potable water, real estate or life and limb should be shouldered by the developer,  the state agencies or the Commonwealth.**

Note  Municipalities may wish to require additional requirements depending on the size and location of the BESS Installation. For example: • A communications plan for nearby residences which may be affected by an emergency event. • Evacuation/shelter-in-place plans • Reporting requirements to local boards or commission for events requiring notification of firefighters or other first responders. • An annual safety report. • It is recommended that emergency plans fully adopt the standards in NFPA 855

**Comment: It is appropriate for a town to increase safety protocols, but the towns should not be saddled with the costs of that.**

6.8.7  Noise BESS Installations must comply with all state noise regulations (310 CMR 7.10) and local noise bylaws or ordinance <<reference Chapter of local noise bylaw>> To the extent practicable, noise producing equipment shall be located at the maximum distance possible from residences and other sensitive noise receptors.

**Comment: To the extent practical in a meaningless term. Any project should be held to the strict standard in the current DEP regulations, or local regulations, or otherwise not be sited in that location.**

Note: Depending on the size and location of the BESS Installation, Municipalities may wish to require that the applicant conduct a noise study demonstrating that it complies with applicable state noise standards, and local noise bylaws or ordinances, if any.

**Comment: This should not be a note. This should be in the bylaw to the effect that the Board shall require a noise study by a licensed acoustician if a board or a group of 10 residents deemed affected asks for one.**

6.9.3  Land Clearing and Soil Erosion Clearing of natural vegetation shall be limited to what is necessary for the construction, operation and maintenance of the BESS Installation or otherwise prescribed by applicable laws, regulations, and bylaws. All combustible vegetation shall be removed for a minimum distance of 10 feet from the BESS modules. Note: NFPA 855 requires a minimum separation of 10 feet between the BESS equipment and combustible materials.

**Comment: Ten feet is a very short distance. It should be larger.**

Notes on Environmental Protections: The following considerations will be primarily applicable to BESS Installations that are colocated with solar photovoltaic generating facilities:

• Some Massachusetts towns require habitat mitigation offsets for large-scale solar built on previously undeveloped land, requiring developers to conserve land in proportion to the land disturbed by the solar installation. The Massachusetts Attorney General’s Office (AGO) Municipal Law Unit (MLU) has approved mitigation ratios of 1:1 and has disapproved one instance of a 4:1 habitat mitigation ratio. Mitigation measures involving replacement of impacted resources (e.g. tree replacement, wetlands replacement, or habitat replacement) should adhere to a no net loss goal and at least a one-to-one replacement ratio of impacted land area. Such mitigation may be incorporated into a local bylaw, and/or included in a CBA.

**Comment: Mitigation should not be used to site a project in a bad location to begin with. If a town agrees to negative impacts on its natural resources, a 4:1 or higher habitat ratio should be allowed.**

• Project owners and operators shall site and design facilities to avoid, minimize or, if impacts cannot be avoided or minimized, mitigate siting impacts and environmental and land use concerns to the greatest extent possible.

**Comment: The greatest extent possible is an unclear standard. Mitigation should not have to occur in the first place**.

. • Projects with a Total Site Suitability Score above 15 for any Criteria-Specific Suitability (see table in Section VIII.C.ii. of Site Suitability Guidance) is an eight or above (a six or above in Unfairly Burdened Areas) may be subject to Compensatory Environmental Mitigation Fees.

**Comment: These are very high scores. Mitigation should not be an option. A project with these scores should not go forward.  A score of 6 is problematic regardless of if an area is defined ( somehow)  to be "Unfairly Burdened ". Once a project with a high score gets built somewhere, it would become "Unfairly Burdened". Are we going to create a mosaic of burdened areas all across the Commonwealth?**

Projects with a Total Site Suitability Score of 5 or below may not be required to pay a Compensatory Environmental Mitigation Fee, but a fee may be included in a CBA if so negotiated in good faith. • Municipalities may require Compensatory Environmental Mitigation Fees pursuant to 225 CMR 29.07: Application of Site Suitability Guidance, and DOER’s Guideline on Minimization and Mitigation Measures for projects with a Site Suitability Score greater than 5. Mitigation fees are calculated according to the following formula: Total Fee = Maximum Fee Per Acre \* (Total Site Suitability Score/25) \* Number of Acres Impacted on Site Footprint •

**Comment: Mitigation fees will not undo environmental damage.**

Stormwater management, watershed protection, flood zones, and wetland protections are regulated at the state and federal levels.

**Comment: These protections were not written to include BESS, so are not strong enough for BESS.**

. • MassDEP Wetlands Program Policy recommends, but does not require, land disturbance and grading to be conducted in a phased manner to minimize runoff from solar development.

**Comment: MassDEP Wetlands policy was not written for BESS. Land disturbance and grading to be conducted in a phased manner to minimize runoff from BESS  development should be required.**

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[www.communitylandandwater.org](https://urldefense.com/v3/__http:/www.communitylandandwater.org__;!!CPANwP4y!USR4vySyj3q-3F-hBPFS4ZqkWahPrBz2d1qWoxOcyag8ZjRmhK_SomI72raK8ZB5HCNMoJ7ziVDkmAI93PEbNpl0v-_z$)

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*Working to preserve, protect and steward the land*

*and water resources of Southeastern Massachusetts.*

*We are losing them fast.*