

COMMENTS ON SITE SUITABILITY ASSESSMENTS FOR CLEAN ENERGY INFRASTRUCTURE

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Sept. 27, 2025

I. PURPOSE

While the stated purpose is to inform EFSB and DOER regulations about clean energy siting, I fear that those regulations could be limited by the scope of issues presented in this methodology. There are many details related to siting that are not addressed here but ultimately need to be regulated (see Note section at end). Even if EEA is assuming that EFSB and DOER will address these details in their respective regulations, the purpose of the methodology should be more explicit that these details need to be addressed and that the two regulatory bodies should include detailed aspects of siting that are not covered by this methodology. My takeaway is that the EEA Site Suitability methodology offers the 10,000 foot perspective yet regulations siting literally occurs on the ground and details matter. This needs to be made clear to all concerned – state and local regulators and applicants.

III. DEFINITIONS

Applicable Facility – It seems to me that Burdened communities are burdened, in part, because of the lack of regulatory protections regarding public health, safety and welfare – both over the course of history and in the recent past. So it remains puzzling to me that EEA would require less regulatory oversight and less assessment for these communities. While a Cumulative Impact Assessment will certainly provide data and analysis that is necessary to protect these communities from project harms, I do not think a CIA will replace the process and the data provided by a Site Suitability Analysis. I would suggest all projects be required to have a Site Suitability Analysis.

Note: While 980 CMR 15.00 was referenced, I was not able to locate it online. I assume it is a draft regulation but I could not find it posted.

Previously Developed Land. This definition seems to imply that there needs to be existing structures or pavement in place despite the disrepair of an impervious surface. Since we live in New England, I immediately think about land on old mills or industrial sites, where the impervious surface might be degraded and where structures might still exist, even if not operational. These certainly seem like previously developed land, but it is not clear from this definition if they would be classified as such. I think EEA should think more broadly about this definition to encourage development on the built environment which we have in Massachusetts, even if it is no longer operational.

Site Footprint – these regulations should make clear that the site footprint also includes any required buffer zone outside of the fenced project area if land alterations occur. This may not be apparent with the current wording about clearing, it seems like the assumption about clearing pertains to grading or roadways.

IV. SITE SUITABILITY ASSESSMENT

A. Applicable Facilities

Exception for Right of Way

For clarity, I would suggest that the first exception might be better written as “*Large Clean Transmission and Distribution Infrastructure Facilities and Small Clean Transmission and Distribution Infrastructure Facilities that are not proposed to be sited in a ~~newly~~-an-established Public Right of Way*”

Exception for Burden Communities

As I commented above, it does not seem appropriate that a project proposed in a Burdened Area has less requirements than those in other communities. While a Cumulative Impact Assessment will certainly provide additional data and is a good requirement for projects in Burdened Areas, the lack of Siting Assessment data puts those communities at a disadvantage. The assessment of each of the siting criteria should be known by the community. This policy sends the message that, yet again, burdened communities are not due the same treatment as other communities. As noted above, I was not able to locate 980 CMR 15.00 online. I assume it is a draft regulation, but I could not find it posted.

B. Scoring Process

i. and ii - Submission of Anticipated Scoring

The statement that applicants should submit their scoring “*as early as possible prior to submitting an application for a Consolidated Permit*” is prudent but seems insufficient for a regulation. Item ii states that the anticipated scores be submitted 45 days prior to the submission of a Consolidated Application. However, as EEA states in i., the process should “*allow time to make design changes or choose a different site*”. 45 days seems insufficient for adequate review and subsequent changes. What should be avoided is an applicant claiming that it has invested too much time and money already on the project and for them to change siting related elements would delay the process. The entire point of doing up-front review is to ensure the site is appropriate and that problematic issues are raised by regulators and/or the community early in the process, so they do not become barriers to deployment. At least 60 days should be required prior to submission of a Consolidated Application, and the anticipated scoring should be shared with all stakeholders as outlined in DOER/EFSB regulations in order to maximize likelihood of a timely review from all pertinent perspectives.

Additionally, there is no process outlined whereby the Site Suitability Score Reviewer is required to confer with local regulators or stakeholders to ground-truth the estimated score. This cannot be a solely paper-based exercise or else it is meaningless; on the ground verification of conditions is essential. The fact about siting is that all siting is local and local knowledge must be interested in a formal manner into this process.

iv. Requests for Score Review by DOER

I read this to mean that in addition to the Applicant, and local government, another party that is substantially and specifically affected may request a score review. If true, the wording can be made clearer. Also, it should be made clear if there is a deadline for submitting this request and the method for making the request.

v. Request for Score Review to EFSB

Similar to above. I read this to mean that in addition to the Applicant, and local government, another party that is substantially and specifically affected may request a score review. If true, the wording can be made clearer. Also, it should be made clear if there is a deadline for submitting this request and the method for making the request.

C. Criteria

i. Development Potential

It is great that a facility using canopies or those that are located on brownfields, eligible landfills or previously developed land will receive a score of zero. However, I would suggest that this should only be for the Development Potential score. Scores should be earned by category; if they get good scores for other Criteria that is a good thing and maybe to be expected but why make it automatic? There may be a reason such a facility might fall short in the other criteria and this should be documented.

It is also good that any facility that overlaps with Protected Open Space will automatically get a 25 for the Total Score; this is an appropriate disincentive. In terms of regulating however, since these regulations don't prohibit development of a facility with a score of 25, I would suggest that regulators will need to know what the Criteria Specific Scores would be so they can apply conditions in the unlikely event that such a project could proceed.

ii. Climate Change Resilience

It makes sense not to build infrastructure in vulnerable areas, as this criteria seems to be focus on - "*exposure of sites to climate hazards*". However, there is a limit to the utility of knowing the infrastructure is resilient. Of course, we shouldn't be building solar in a flood zone . However, I would suggest that EEA change its focus for this criteria to instead address how the facility advances the climate resilience of the host community. Advancing appropriate siting for community resiliency seems extremely important in the long-term and something that engineers building infrastructure will not otherwise address. The criteria should encourage maintaining forests, protecting water, minimizing stormwater, retain soil integrity, etc. – achieving greater resiliency in a changing climate. In reviewing the referenced tool - the Climate Resilience Design Standard Tool - this information could be obtained, in part, by the Applicant completing the Site Suitability Form Overview including all questions in Sections SS1, SS2 and SS3.

iii. Carbon Storage and Sequestration

This is a good criteria and I support the 50-year (or more) horizon. However, neither source for measurement - the National Forest Carbon Monitoring System and the Annual NLCD land cover data websites are user friendly and therefore review by local government or stakeholders will be difficult, making accountability of scoring difficult to achieve. There is also the very real danger

of using a measurement system related to carbon sequestration that is maintained by the USDA or the USGS given the federal government's willingness to downplay climate crisis and take data offline. I would suggest EEA figure out a better way to measure the desired information. Also, given the importance of soil for carbon sequestration, EEA should also refer to the Commonwealth's Healthy Soils Program.

iv. Biodiversity

I think the sources of measurement – BioMap and Natural Heritage and Endangered Species are provide the correct data sources to assess biodiversity. However, it is not clear to me why EEA is prioritizing Priority Habitat over BioMap except for the reason that it would trigger MEPA review? Similarly, as I have said many times before there is nothing in the BioMap materials from MassWildlife that places greater value on Core Habitat over Critical Natural Landscape – both are equally important but have different characteristics. This seems to be a myth internal to EEA that has now achieved “urban legend” status with no basis in fact. I would encourage EEA to apply the same strict protective approach for both categories of BioMap.

In reviewing the prioritization chart, it seems that EEA is splitting hairs in the scoring table. I do commend EEA for recognizing Regional Connectivity, a BioMap Component, since what we do in Massachusetts has ecosystem impact on the larger Northeast Region. This is often overlooked but vitally important.

In terms of calculating a score, it is unclear what 1) “*grid cells centered inside the Site Footprint*” means. I strongly support EEA continuing the SMART 3.0 approach that any land overlapping with BioMap is considered in BioMap but the “grid cell centered” language makes this unclear.

Unlike the other data sources, these are user friendly and easily accessible to local government and the public.

v. Agricultural Resources

As I commented on with the Siting Straw Poll, determining site suitability of agriculture based on soil quality data is insufficient. This soil data indicates the quality of the soil, it does not reflect the agricultural activity or use. Poor siting is not only putting installations on land that is good for agriculture but equally, if not more important, avoiding taking land out of agricultural production for clean energy development. For example, SMART 3.0 discourages conversion of crop growing for hay or grazing, a net loss to essential food production. Another limit to the soil data is that land with the same rating may be used differently – even as an agricultural use. For example, a solar installation located on a side field where there is underutilized land along a farm's edge might be a good location and helpful to a farm's viability and therefore long-term operation, while placing it on the active farm field is poor siting – both could have same soil classification. Agriculture is an activity, not just a soil rating. This should be accounted for by EEA.

If EEA is going to allow facilities to be developed on agricultural land, it should prioritize land that is least good for production and/ or minimally used for food production. Below are USDA summaries of farmland types in Massachusetts. I would suggest that “Not Prime Farmland”

receive a zero rating. All other productive farmland categories should be prioritized with crop production in mind, active - robust crop production receiving a score of five and grazing/hay production receiving a middle score of 3. Similarly, as mentioned above, fallow land on the edges of productive farms can be economically beneficial to farmers allowing continued growing while not depreciating the agricultural ability – these should get lower scores.

- Prime Farmland: Prime Farmland soils have specific physical and chemical characteristics that make them well suited for growing crops.
- Farmland of Statewide Importance: Farmland of Statewide Importance are those soils that fail to meet one or more of the requirements of Prime Farmland, but are important for the production of food, feed, fiber, or forage crops. They include those soils that are nearly Prime Farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods.
- Farmland of Unique Importance: Farmland of Unique Importance is land other than Prime Farmland and Farmland of Statewide Importance that is used for the production of specific high value food and fiber crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality and/or high yields of a specific crop when treated and managed according to acceptable farming methods.
- Farmland of Local Importance: In some local areas there is concern for certain additional farmlands for the production of food, feed, fiber, forage, and oilseed crops, even though these lands are not identified as having national or statewide importance.
- Not Prime Farmland: Soils that do not meet the criteria for Prime Farmland, Farmland of Statewide Importance, or Farmland of Unique Importance are classified as not prime farmland. These soils may be in agricultural use but may require more intense management to maintain high agricultural yields.

vi. Social and Environmental Burdens

Since this tool is under development, it is not possible to assess. However, I would suggest that in addition to the two criteria now being considered – environmentally vulnerable and burdened communities- there should be an awareness and calculation for communities that are already heavily burdened by clean energy facility development. These may not be environmentally vulnerable nor Burdened from an EJ perspective, but they are burdened. This is particularly true of small, often rural communities in Central and Southeast Mass.

vii. Social and Environmental Benefits

As I have commented multiple times, I am highly skeptical of the concept of Adders and Subtractors – an approach used in SMART 2.0 and seemingly attractive to EEA/DOER. This is because it opens the process to “gaming the system” and lessens the integrity and meaningfulness of scoring.

If there are elements of a facility that allow for its Total Score to be modified, I strongly believe these should be directly tied to the impacts of siting rather than other politically attractive outcomes that have nothing to do with siting. For example, creation of jobs and recreational spaces, while good and beneficial, are not related to project siting. Similarly, things like pollinator friendly design should be achieved through required design and performance standards

established in regulations by EFSB and DOER. To do otherwise EEA is potentially creating a pathway that would reward a poorly sited facility by giving it a better score than it deserves.

What I do like very much and the only redeeming part of this category is the introduction of the requirement that in order for a facility to get a beneficial modifier (subtraction of points), the Applicant and the host community must agree in writing. This at least recognizes that the host community knows what its needs are and is in control of what it accepts as a benefit; this as opposed to the Commonwealth imposing or assuming benefits for a community like it did in SMART 2.0.

While EEA will allow up to 5 points to be reduced, I think for purposes of regulation, it should be made clear that this reduction should be from the Total Score and that Criteria Specific scores should not be changed. This is important since Criteria Specific scores will inform conditions regarding minimization or mitigation. It is easy enough to report scoring as: Total Score, Criteria Scores, and Modified Total Score.

D. OTHER CONSIDERATIONS OF NOTE

i. Drinking Water Supply

I have major problems with this section. I think EEA drops the ball in terms of water protection. There is so much more that should be included here. The current Siting Suitability feels like it is kicking the can down the road and leaving municipalities without a clear road forward to protect drinking water.

Paragraph 2 states that “*Local controls must be in the form of zoning or general bylaws or ordinances, or health regulations that meet the requirements of the 310 CMR 22.00*” The 310 regulation is focused on and limited to protection of public water supplies. By simply citing that DEP is the regulator of water supplies, EEA is missing all the communities that rely on private drinking water wells and that do not have public water supplies. Many, many small towns do not have public water. For example, my town of Shutesbury is 100% supplied by residential drinking water wells, the only public water (by technical definition) is the well that supplies the elementary school. This oversight needs to be corrected.

Further, by my reading, the actual DEP regulations are insufficient in terms of protecting various drinking water sourced by aquifers or the water sources that protect them. In Western Mass. recent resistance to ESS placement has occurred in Westfield and Orange, both of which have public water supplies but the aquifers sourcing the water are vulnerable to ESS contamination. In the case of Orange, for example, approximately 60% of the town’s water comes from one aquifer; if that is contaminated by an ESS, there is no real alternative source to provide the volume needed.

Additionally, despite EEA’s statement that DEP’s Drinking Water Program's Guideline #2011-1 covers batteries, my reading of this policy does not indicate that. The policy was developed in 2011 when ESS was not a policy issue. My reading is that this policy covers solar and wind; only

by legal extension (the SJC’s interpretation that accessories to a solar development such as ESS) are batteries included. So, this statement seems to fall short, and I do not think it is accurate.

Furthermore, without regulations that adequately allow protection of drinking water as it relates to clean energy protection, municipalities are both vulnerable and legally hamstrung. As an example, in the case of Shutesbury, the AG twice rejected town-approved energy storage regulations that included water protection (2023 solar bylaw and a 2024 Energy Storage general bylaw), as being in conflict with the Dover Amendment. Based on the Clean Energy statute and its statement that municipalities that comply with the subsequent clean energy regulations will be deemed to be compliant with the Dover Amendment, there is a pathway for EEA, EFSB and DOER to allow municipalities to provide regulatory protection for drinking water. It is up to EEA, DOER and EFSB include enabling language to allow municipalities to develop zoning and regulations that protect drinking water.

Substantively, there is much that can contaminate drinking water supplies. Since DOER requires ESS to be included in a solar installation in order to receive a SMART subsidy, ESS installations will continue throughout the state. This is furthered by the Commonwealth’s efforts to build more standalone energy storage. While debatable about how safe lithium-ion battery technology is becoming, the fact remains that fires do occur at these facilities and toxins are released into the air and into the ground, often by heat suppressing water applied by fire fighters. More recently, I have found evidence that PFAS can be found on ESS sites, both because it is part of the lithium-ion battery components and because it also can be applied as standard firefighting practice. The Commonwealth is well aware of the burdens and dangers of PFAS in our soils and water; EEA should be working to reduce the instances of PFAS and other contamination and relying on outdated DEP regulations.

My strong position is that water protection is essential. EEA, must embrace the Environmental in its name and provide clear siting protections for drinking water – both public and private. For public this should extend to all zones – I, II and III. This should include prohibition on ESS in areas where drinking water sources are vital and contamination would leave communities vulnerable. Further, the Siting Suitability guidance should explicitly enable municipalities to develop zoning and regulations that are protective of drinking water. In short, I think EEA staff need to dig much deeper into this issue and come up with a better solution than citing outdated DEP regulation.

ii. Wetlands

This too seems to be inadequate with EEA simply citing Wetlands law with little expansive thinking. Of course, solar and batteries should not be in wetlands jurisdictional areas. But how about considering expanded buffer zones around the wetlands beyond the state Wetlands regulations. In addition, many municipalities in the Commonwealth have local wetlands regulations that provide for greater protections in order to minimize the negative impacts on wetlands. EEA Siting Guidelines should explicitly allow municipal wetlands regulations to be in full effect in regards to the siting of clean energy. The current Siting draft only states that “*Local jurisdictions may also have wetlands protection bylaws*” – a simple statement of fact but it doesn’t affirm municipalities can use these regulations in the clean energy context. Further this guidance cites that the EFSB can waive these local regulations, undermines local protective

intent and also raising questions about if municipal regulation is allowed. The language should clearly allow local wetlands regulations to be in effect for clean energy projects.

iii. Noise

Similar to wetlands, there is one state standard for noise as established by DEP regulation. However, some municipalities, such as Shutesbury, have developed more nuanced regulations to address issues of noise that reference the DEP noise regulation. The Site Suitability regulations should explicitly allow local regulations that do not conflict with DEP noise standards to be in effect so that implementation of these regulations can be locally informed and applied.

It is important to note that noise issues can be different during construction than they might be during operation. If not in these Site Suitability guidelines, DOER and EFSB need to address noise in performance and design standards, as well as in DOER's Public Health guidelines. If EFSB has the ability to waive noise requirements, as noted in footnote 15, then there must be a requirement for written explanation that is publicly available and subject to public comment.

iv. Air Quality and Emissions

EEA rightly calls out anaerobic digestion facilities as sources of air pollution - these should not be considered clean energy.

More to the point this regulation does not address the possibility of emergency-based emissions which would most likely come from an energy storage fire. The possibility of ESS fires makes the need for appropriate siting important. For example, we have seen in both California and New York state ESS fires that evacuation occurred. Therefore, proximity to schools, hospitals, or other facilities that would need to be evacuated in case of an ESS fire, should be taken into account when scoring a facility. Even if no scoring is applied, it would be responsible for these guidelines to address the potential issues; better to prohibit siting in proximity of potentially vulnerable uses. These regulations could also reference DOER and EFSB public health sections of the respective regulations.

F. SCORE MODIFIER TABLE

Developmental potential. For projects with canopies or on appropriately sited land, I think an automatic zero score for the Developmental Potential criteria makes sense. But this should not be extended to the other criteria – zero scores need to be earned and demonstrated for Biodiversity, Carbon Storage, Agricultural Resources and Social and Environmental Burdens. The Commonwealth does want to encourage canopies and appropriate siting but I fear that by creating an automatic zero pathway for all criteria, this might allow for canopy projects that could in other ways get a mixed criteria score. EEA should require facilities to demonstrate good siting to get good scores.

Social and environmental benefits – EEA's requirement that social and environmental benefits can modify a score only with agreement by the host municipality is excellent and essential. To reiterate, while I think communities should be respected for knowing their own needs, I think projects that trigger a modifier should be limited to those that directly relate to siting rather than

unrelated benefits like job creation. Other benefits like pollinator design should be required by DOER and EFSB by performance and design standards.

V. USE OF METHODOLOGY AT THE ENERGY FACILITIES SITING BOARD

A. Pre-filing

It is excellent that Estimated Scores be shared with stakeholders during the Pre-Filing period and prior to seeking Final Score Determination. I would suggest this is a “shall” rather than a “may”, the term “*will be expected*” does not carry sufficient regulatory weight.

B. Application Requirements

In addition to documenting why the site was chosen, this requirement should also include explanation for why the alternative sites were not chosen. This needs to be a defensible decision and without information on all sites that were considered or possible, comparison cannot happen.

As a regulator, if presented with the documentation of social and environmental benefits, my first question would be “what does the host municipality think about these?” So, I think it is important for this requirement to include not simply the applicant’s ideas and a proposal for social and environmental benefits but those that have been discussed with the host municipality, demonstration of some engagement regarding these, and if possible, an indication (not commitment) of interest by the host municipality. This will likely occur if there is a Community Benefit Plan or Agreement submitted with an application but since these are not required by OEJE this cannot be taken for granted.

C. Permitting Adjudication

i. Applicable Facilities

Again, I think that the information gathered and presented for Site Suitability Scoring should be required for Burdened Communities as well. The Cumulative Impact Assessment is a great thing but I don’t see that the information that will be presented by the Site Suitability Analysis will be available or required in the CIA. Siting Scoring, especially for applying permit conditions, is essential; not requiring this makes siting in Burdened Communities less rigorous.

ii. Use of Site Suitability Score

If all facilities are required to do a Site Suitability Score process, this recommendation would not be necessary.

iii. Use of Total Site Suitability Score

As mentioned earlier, any modifiers that are applied should only be applied to the Total Score rather than the Criteria Specific score otherwise the basis for mitigation or conditions will be less clear. The preservation of Criteria Specific Score can inform review of the projects design plan and mitigation measures.

iv. Use of Criteria-Specific Suitability Scores

See above regarding preserving Criteria Specific Scores, even if modifiers are allowed.

v. De Novo Adjudication

I support the approach that during De Novo review the Site Suitability Scores should remain unchanged. Additionally, I think the EFSB should have a process that is clearly established beforehand about what changes may be considered de minimis so it is understood by all parties when a new Site Suitability Analysis would be triggered. Project changes or site condition changes that are not de minimis should definitely require a new Site Suitability Assessment that includes community engagement and input otherwise an applicant can change siting during a de novo process with no accountability or consequences.

VI. USE OF METHODOLOGY FOR CONSOLIDATED LOCAL PERMITTING

A. Pre-Filing

Same as for EFSB permitting process: It is excellent that Estimated Scores be shared with stakeholders during the Pre-Filing period and prior to seeking Final Score Determination. I would suggest this is a “shall” rather than a “may” since the term “*will be expected*” does not carry sufficient regulatory weight. I appreciate that these must be submitted as part of the application to Local Government.

B. Application Requirements

Same as EFSB permitting process: In addition to documenting why the site was chosen, this requirement should also include explanation for why the alternative sites were not chosen. This needs to be a defensible decision and without information on all sites, comparison is not possible.

Should require documentation to back up proposed minimization and mitigation measures.

C. Permitting Process

i. Use of Total Site Suitability Score

I like the statement that “*Significant deference should be given to municipalities seeking mitigation measures*” but I think the connected statement applying to projects scoring over 15, negates this deference. It is possible, for example, that there is a project has a total score of 13 with two Criteria Specific Scores of 5; therefore in need of minimization and mitigation. There should be the recognition that as a local regulator, municipal government should have the necessary leeway based on Criteria Specific Scores not the Total Score.

ii. Use of Criteria-Specific Suitability Scores

As mentioned earlier, it is important that Criteria-Specific Scores do not change if there is a modifier in place. The unchanged score is the best mechanism for informing minimization and mitigation measures that might be put in place with conditions.

For integrity of the process, I think that requirements for mitigation measures should be relevant to the category in which the score is assessed otherwise there is no basis for that mitigation. This would not preclude local government placing reasonable conditions on a project which are not related to any criteria or scoring.

Regarding the assumptions in the chart, I agree that a score of 3.1 to 4.0 is “*Not very suitable*” and will have “*moderate to high impact*”. However, the chart implies that such a project will be approved. This is where the Total Score is important. I would suggest that the regulations be clearer so that projects scoring under 4.0 on Criteria are not assumed to be approved with mitigation since the cumulative impact of all the criteria, i.e. the Total Score, might result in denial of a project.

VII. FUTURE UPDATES TO METHODOLOGY AND GUIDANCE

I appreciate the statement that the public comment period regarding future changes will remain open for at least three weeks.

ADDITIONAL NOTE

While it might be assumed that EFSB and DOER regulations will address details of siting, given the importance of various elements of clean energy facility siting, I think these should be mentioned in EEA’s Site Suitability Guideline. I would suggest EEA make explicit mention of these to establish the fact that these need to be included in state regulations, presumably by EFSB and DOER. These include:

- Minimization of slope for the entire site and installation on slopes
- Constraints regarding earthmoving for construction and installation
- Placement and extent of stormwater controls
- Minimization of erosion conditions
- Required road frontage
- Wetlands buffers
- Buffers outside of the developed area (outside fencing of arrays)
- Total size of developed parcel
- Limitations on contiguous parcels
- Road integrity/length and composition (paved/unpaved)
- Proximity to traffic
- Proximity to residences, businesses or other local uses