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Comments of the Nature Conservancy in Massachusetts

RE: Solar Massachusetts Renewable Target, SMART solar incentive program regulations (225 CMR 28.00)

July 25, 2025

The Nature Conservancy (“TNC”) respectfully submits its comments on the regulations, 225 CMR 28.00 (“SMART 3.0”), promulgated by the MA Department of Energy Resources (“DOER”) for the Solar Massachusetts Renewable Target (“SMART”) Program. TNC is a global conservation organization committed to finding durable solutions that support ecosystems and communities with a mission to conserve the lands and waters on which all life depends.

TNC has been deeply engaged in the policy, planning, and implementation of renewable energy policy in Massachusetts and across the globe.

In Massachusetts, the Commonwealth’s decarbonization goals and increased electricity demand require us to first conserve energy as much as possible and concurrently more than double the generation of renewable electricity. When considering where to site solar generation, we must also consider the Commonwealth’s goals for land use such as biodiversity, forest carbon and resilience. To avoid conflicts with these land-related goals, we should incentivize the siting of solar generation to the built environment and to other less sensitive land areas. Two independent studies conducted by Mass Audubon: “Growing Solar, Protecting [Nature](#)”, and MA DOER: [Technical Potential of Solar Study](#) provide an analysis that shows there are sufficient opportunities to site solar generation, meet our decarbonization goals and avoid impacts on sensitive areas and populations.

We support the goals and intent of the SMART Program to foster development of solar energy in Massachusetts in the built environment while avoiding impacts on nature and people.

As proposed, SMART 3.0 appropriately structures eligibility requirements and incentives for ground-mounted solar to facilitate lower-impact development and avoid higher-impact development. SMART 3.0 develops a framework that functions as a mitigation hierarchy to

avoid, minimize, and mitigate impacts of development. For example, SMART establishes eligibility categories that will avoid impacts to the most vulnerable and irreplaceable resources; it encourages project modifications (minimizes impacts) to the project footprint in order to meet ineligibility criteria; and it applies a detailed mitigation formula incorporating site suitability criteria including biodiversity, community resilience, and natural and working lands carbon that serves to mitigate impacts that cannot be avoided or minimized. Overall, as set forth below, and in the following sections discussing specific regulations, we believe SMART 3.0 has incorporated reasonable compromises supported by both the conservation community and solar developers. Specifically, SMART 3.0:

- Incorporates site suitability eligibility requirements and incentives based on biodiversity, forest carbon, and community resilience.
- Provides, as part of the site suitability eligibility criteria and incentives, a methodology to reconcile competing land use interests by aligning the Commonwealth's conservation, climate and energy goals. Site Suitability expedites the siting of solar (and other clean energy infrastructure) by identifying suitable areas for siting and unsuitable areas to avoid.
- Creates an efficient and equitable process to avoid sites with environmental impacts by incorporating site suitability, and in conjunction with the Climate Law's siting and permitting policies fostering community engagement, recognizes the lived experiences of community residents.
- Includes a one-time upfront mitigation payment that allows certainty for developers to make investment decisions. Among other benefits, a one-time payment also provides more readily available funds to invest in natural and working lands that will pay dividends by building up carbon storage and sequestration resources among other benefits.

In promulgating SMART 3.0, DOER recognized the principals and guardrails presented by TNC and its conservation NGO partners in comments and discussions as part of the important stakeholder process as set forth below:

- Higher incentives would encourage solar development on buildings, parking lots, and developed lands like landfills and brownfields, and the scores assigned to these criteria should be high enough to deter solar development in areas of high conservation value.

- SMART 3.0, consistent with site suitability criteria and the mitigation hierarchy in the Climate Act regulations, should incorporate carbon stocks and sequestration, biodiversity, and climate change resilience as significant core criteria, and weigh them as higher values throughout the process for calculating the amount of incentives and as part of any application of the mitigation hierarchy.
- BioMap Core Habitat and Forest Carbon (stock and potential sequestration) should be used to determine eligibility criteria and incentives. SMART is an opt-in incentive program for developers and is not a regulatory permitting program used to site and permit solar generation. In SMART, unlike other mandatory regulatory programs, developers may opt to proceed with siting and permitting solar generation independently from SMART's eligibility requirements.

TNC appreciates the DOER's efforts to facilitate engagement among diverse parties, recognize the consensus comments of numerous stakeholders and to include these principles in SMART 3.0. We offer the following comments on the regulations.

Specific Comments on Regulations

As noted above, TNC strongly supports SMART 3.0 as proposed and appreciates DOER's work in promulgating SMART 3.0. We offer the comments below on specific sections.

Suggested revisions are noted in *italics* and explanations referenced below in Comments. In some sections, we offer just Comments.

225 CMR 28.05: Annual Adjustable Block and Rate Structure

(2) Annual Program Year Report

Starting in Program Year 2026, annually, no later than December 1 or the following Business Day, the Department shall publish a report on the Department's website that contains the results of the Annual SMART Program Assessment. The report shall *include a detailed analysis of land use types upon which STGUs were constructed, using the full Project Footprint and* contain the annual determinations detailed in 225 CMR 28.05(3) through (7).

Comments

- We support the annual report. As noted, the report should include a detailed analysis of land use types upon which STGUs were constructed, along with the impacts to BioMap Core Habitat and Critical Natural Landscape, Forest Carbon values, and other criteria, using the full Project Footprint. This will allow DOER and

stakeholders to understand the results of the eligibility categories and the mitigation formula, and assess whether adjustments need to be made going forward. Case studies, project examples, and experiences in the field and can also inform adaptive management.

225 CMR 28.08: Land Use

225 CMR 28.08: Land Use: (1) Ineligible Land. A STGU shall be ineligible for 225 CMR 28.00 if its Project Footprint overlaps with the following land use types:

- (a) Wetland Resource Areas, including Buffer Zones, as defined under 310 CMR 10.04;
- (b) properties included in the State Register pursuant to 950 CMR 71.00, except as authorized by regulatory bodies; or
- (c) protected open space as established under Article XCVII of the Amendments to the Constitution. Exception: A STGU shall not be subject to 225 CMR 28.08(1)(c) if it receives one of the Locational Compensation Rate Adders listed under 225 CMR 28.13(3)(b); or
- (d) *Priority Habitat, as designed in 321 CMR 10.00: Massachusetts Endangered Species Act.*

Comments

- In addition to wetland resources and Article 97 lands, ineligibility should include Priority Habitat, used to implement the MA Endangered Species Act. These areas regulated under current Massachusetts statutes.

225 CMR 28.08: Land Use: (2) Ineligible Land for Ground-Mounted STGUs above 250 kW.

A ground-mounted STGU above 250 kW that is not located on Previously Developed land and does not qualify for a Locational Compensation Rate Adder listed under 225 CMR 28.13(3)(b) shall be ineligible for 225 CMR 28.00 if []:

1. *the Project Footprint overlaps with land designated as Core Habitat; or*
2. *more than 10% of the Project Footprint overlaps with the highest levels of forest carbon in MA, as detailed in the Department's Guideline Regarding Land Use, Siting, and Project Segmentation.*

The Department may partner with third- party entities to develop its approach for measuring the carbon storage score of a STGU.

Comments

- We applaud the use of BioMap Core Habitat and areas with the highest forest carbon (top 20% of Massachusetts forests as a minimum) as criteria to define areas ineligible for SMART incentives. The program should be implemented to avoid these important and irreplaceable ecological and climate mitigation resources.

The language that we proposed will more accurately represent, as compared to the proposed regulations, the appropriate, transparent, and efficient application of forest carbon data to the ineligibility framework.

- As italicized above, we recommend that the regulations clearly state that the same approach as stated in 225 CMR 28.09(2), i.e. consulting with experts, be used here to define the application of data to the ineligibility criteria. As stated under 225 CMR 28.09: Mitigation Fee: “The Department may partner with third-party entities to develop its approach for measuring...” the Ecological Integrity score of a STGU, the Carbon Storage score, and other inputs to the mitigation formula. We strongly support this collaborative approach, bringing in entities with the most science-based ecological expertise and science communication skills to interpret and apply this data. For example, outside experts may be helpful in defining methods that are understandable, consistent, and fair, and in evaluating sensitive areas that overlap with STGU footprints, and in making recommendations on how best to avoid unintended impacts to BioMap Core Habitat and forest carbon stocks and sequestration, or that unduly restrict development.

225 CMR 28.08: Land Use: (3) Determination of Previously Developed Land

We support the definition of Previously Developed and the definition of Project Footprint as used in this section with one addition to the definition of Project Footprint: “The acreage of land encompassed by a STGU’s solar photovoltaic modules, plus any land significantly impacted by construction of the STGU, including, but not limited to, land altered *of its natural vegetative composition and structure* for clearing, grading, and roadways.” See Section 28.02. Definitions, Project Footprint.

Comments

- The concept that any land cleared of native vegetation, with alteration of its natural composition and structure, should be part of Project Footprint.
- We should also consider, in some cases as may be applicable, the restoration potential value of land that has been previously developed.

225 CMR 28.09: Mitigation Fee (2) Mitigation Fee Formula

(2) Mitigation Fee Formula.

Comments

- TNC applauds the use of weighted mitigation criteria in the mitigation fee formula. With the addition of Critical Natural Landscape, we support the list of six mitigation factors in 225 CMR 28.09 and the draft weighted scoring approach from December 2024, representing variable weighting for each criterion, and scoring the criteria based on level of impact (1 through 4). We are pleased that the details will be clearly laid out in the “*Guideline Regarding Land Use, Siting, and Project Segmentation*” (“*Guideline*”) document. We support that the December proposal gives the highest weights to the irreplaceable ecological factors of forest carbon and ecological integrity, and we propose that Critical Natural Landscape also receive the highest weighting (see below). And again, we agree that “The Department may partner with third-party entities to develop its approach for measuring...” to ensure the mitigation formula minimizes and mitigates impacts to the defined values.
- TNC supports the use of BioMap Critical Natural Landscape (“CNL”) as a mitigation criterion. While we understand the reasoning, e.g., provide more flexibility for siting, behind the decision to remove CNL as a criterion for incentive ineligibility, as it was under SMART 2.0, we think CNL is an appropriate and necessary input to inform mitigation. Rationale: [BioMap CNL](#) includes [Landscape Blocks](#), which represent the most intact landscapes within the state, and critical buffers to high-biodiversity [wetlands](#) and [rivers](#). Within Landscape Blocks, the highest levels of the UMass Index of [ecological integrity \(“IEI”\)](#) were selected, and coalesce into the largest, most intact, and minimally fragmented mosaics of forest and other ecosystems in the state. Adding CNL as a mitigation criterion therefore ensures fewer impacts to large intact landscapes that would not be realized using IEI alone. Wetland and aquatic buffers would also be vulnerable if CNL were not used as a mitigation criterion.
- We approve of the application of IEI as a mitigation criterion, which builds nuance and refinement into the mitigation criteria. By using both IEI and CNL as mitigation criteria, we can avoid and minimize impacts to a full range of ecosystem functions and benefits.

- We agree with the use of forest carbon storage as a criterion. This forward-looking component will be critical to MA Clean Energy and Climate Plans of 2025/2030 and 2050 net zero by 2050 goals, as carbon sequestration and storage by forests (and other ecological systems) are the only current technically and economically viable tool at scale to absorb unavoidable emissions to reach net zero.
- We look forward to further comments on mitigation compensation following the release and our review of *Guideline*. We recommend that the *Guideline* provide clarifying language on mitigation consistent with the 2024 Climate Act. The Act requires the application of the mitigation hierarchy during the permitting process to avoid, or minimize negative impacts of siting on the environment, people, and the commonwealth's goals for climate mitigation, resilience, biodiversity, and protection of natural and working lands. We refer the Department to our [detailed comments](#) to the Executive Office of Energy and Environmental Affairs (“EEA”) on the application of the mitigation hierarchy in response to the Proposed Siting and Permitting Regulations recently promulgated for public comment by EEA.
- The *Guideline* should also provide for a Land Use look back which would include, as part of any site suitability project evaluation, a multi-year (e.g. 5-year) look-back period for forest carbon, BioMap Core Habitat and Critical Natural Landscape, the Index of Ecological Integrity and other criteria to ensure there has not been manipulation of the land to affect the site suitability scoring. This would decrease the possibility of gaming the system to remove trees or degrade habitat in order to score more favorably under site suitability.
- We encourage DOER to incorporate the mitigation principles and management best practices recommendations highlighted in our previously mentioned comments to EEA and provided in the Nature Conservancy’s guidance document: “[Achieving Conservation and Development: Ten Principles for Applying the Mitigation Hierarchy](#).” The addition of best management practices will provide further opportunities to minimize and mitigate impacts.

225 CMR 28.09: Mitigation Fee (2) (b) Review Process for Mitigation Fee

(2)(b) Review Process for Mitigation Fee

Comments

- We support the concept that “an applicant may request a review from the Department of whether the Mitigation Fee criteria scoring for a prospective Project Footprint presents a clear and obvious discrepancy from on-site conditions.” We agree that these site visits may be necessary to accurately apply the mitigation formula. These reviews should be limited to cases where land use within a Project Footprint has changed (e.g. land clearing, development, etc.) subsequent to the development of mitigation criteria maps and data. The reviews should not focus on the veracity of the mitigation criteria data itself (e.g. BioMap, forest carbon, Index of Ecological integrity, etc.). Habitat mapping includes sophisticated decision-rules that may not be replicable with a site visit, and remotely sensed and modeled data measure aspects of the landscape that cannot be “ground truthed” in the field.

225 CMR 28.09: Mitigation Fee (5) Trust Fund.

Comments:

- It will be vitally important to ensure that ecologically equivalent lands, of equal or greater size, are conserved using mitigation funds. Receiving areas for funding should have the same, or higher values as those being developed, using the mitigation metrics including Critical Natural Landscape, Ecological Integrity, Carbon Storage, etc. Receiving areas should also be of equal or greater size to those impacted from development.
- Any distribution of funds should be in proximity to impacts with a system designed to apply mitigation funds to support locations proximal to the location of the impact. For example, funds should be applied to geographic units such as counties, or a regional approach (i.e. western, central, eastern, Cape and Islands) in proximity to impacts.
- There are multiple options/examples of existing trust funds that align with the intent of the Act which could accept deposits of mitigation fees that support the criteria under site suitability.
 - The Biodiversity Trust Fund (section 35D1/2 of Chapter 10 of the General Laws) would enable mitigation funds to support the state’s biodiversity goals and programs such as land acquisition, habitat management, ecosystem restoration,

- The Global Warming Solutions Trust (Section 35GGG of Chapter 10 of the General Laws); would enable funds to support carbon sequestration and storage, natural and working lands and adaptation/resilience.

Thank you for your time and consideration. Please feel free to contact me or Andy Finton our senior conservation ecologist (afinton@tnc.org or 617-571-9964) should you have any questions.

Sincerely,

The Nature Conservancy



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