



February 23, 2018

Judith Judson, Commissioner
Massachusetts Department of Energy Resources
100 Cambridge Street 10th Floor
Boston, MA 02116

Re: SMART Guideline Comments

Dear Commissioner Judson:

The undersigned industry associations and organizations (the "Associations"), on behalf of more than 100 member companies, write to provide our detailed comments on the Solar Massachusetts Renewable Target (SMART) program guidelines released on January 22, 2018.

We appreciate the hard work and leadership from Department of Energy Resources (DOER) staff, the Executive Office of Energy and Environmental Affairs (EEA) staff, and Department of Agricultural Resources (MDAR) staff in developing these guidelines. We further appreciate the open dialogue with you and your staff throughout this process. We look forward to working with DOER to ensure that the final guidelines that clarify rules, procedures, and processes under the SMART program pursuant to 225 CMR 20.00 achieve the Baker-Polito Administration's clean energy goals.

The stakes are very high. Unfortunately, the current draft Guidelines contain significant issues and, in some cases, fail to provide the clarity required by project stakeholders to confidently develop and build under the SMART program. By adopting the following recommendations proposed in these comments, we believe SMART can best fulfill its obligation under Chapter 75 of the Acts of 2016, *An Act Relative to Solar Energy* ("the Act"), to create a stable and sustainable solar market at a reasonable cost to ratepayers, while supporting diverse installation types that provide unique benefits. We believe these comments and capture recommendations that will help ensure that the SMART program will continue to create jobs in the Commonwealth, support local economies, and help businesses, homeowners, schools, hospitals, and local governments save on their electricity bills.

The breadth of the signatories to these comments underscores our collective commitment to maintaining the Commonwealth's national leadership position in solar, but also our concern that if the following recommendations are not adopted, the SMART program will fail to live up to its potential, the Baker-Polito Administration's solar goals, and the goals of the enabling legislation behind the program.

SUMMARY OF KEY ISSUES

- A. Remove impractical barriers to dual-use adoption under the Agricultural Solar Tariff Generation Units Guideline.**
- B. Optimize the potential of Energy Storage Systems by revising the Energy Storage Adder Guideline to allow ESS participation in the ISO-New England capacity and ancillary services markets.**
- C. Align the Land Use and Siting Guideline with local zoning and sensible real estate practices.**
- D. Support program integrity by ensuring transparent, objective standards for Statement of Qualification Applications and sensible treatment of Compensation Rate Adders.**

DETAILED DISCUSSION

A. DEFINITION OF AGRICULTURAL SOLAR TARIFF GENERATION UNITS GUIDELINE

The solar industry appreciates DOER's recognition that dual-use agricultural solar projects, though beneficial, require additional compensation to justify the higher risks and costs for solar developers involved in installing and operating these projects. We applaud DOER for including an adder to recognize the benefits of dual use projects, and to encourage the solar industry to partner with landowners to keep land in agricultural use during the course of the SMART program.

However, we are concerned that the combination of proposed restrictions in the Agricultural Solar Tariff Generation Guideline would actually make these projects less financially attractive to farmers than regular, single-use, ground mounted systems. As written, the Guideline will encourage most landowners and solar developers to pursue single-use ground mounted systems instead of dual use projects. Given that the goal of the adder is to encourage a range of dual-use projects, we recommend several revisions to ensure that the value proposition associated with an Agricultural Solar Tariff Generating Unit is at least as appealing as that of a traditional ground mounted system. Specifically, we recommend the following changes, each of which is explained further below:

- Amend the Guideline to be flexible enough for a range of agricultural dual uses.
- Remove the requirement to maintain shading at no more than 50% of any square foot, or amend it to clarify that this requirement applies to the entire area of the array, rather than the space immediately beneath the panels.
- Remove the requirement to space individual panels at least 4 feet apart, or modify it to clarify that the 4-foot rule applies to the space between rows of panels.
- Reduce the minimum height requirements to no more than 6 feet.
- Increase the maximum size of Agricultural Solar Tariff Generating Units to 5 MW, and clarify that Agricultural Canopies may be co-located with traditional ground-mounted projects as long as the total size does not exceed 5 MW.
- Add an optional, streamlined pre-approval process to provide certainty to developers and landowners that their projects will meet the new requirements.

1. Amend the Guideline to be flexible enough for a range of agricultural dual uses

The current Guideline appears to be highly over-engineered to ensure that nearly every conceivable future agricultural use could be adopted—regardless of the past use of the property or its suitability for certain types of agriculture. The result is that the Guideline as currently written is highly inflexible, and will introduce significant additional costs for solar developers that are not justified by the range of viable agricultural dual uses available or the state of the science. In most cases, the cost premium involved in designing and constructing systems to meet the proposed requirements would exceed the value of the Agricultural Solar Tariff Generation adder, meaning that such projects will be less financially attractive to developers than traditional ground-mounted projects. Consequently, the Guideline will fail to encourage developers to pursue these projects.

Rather than adopt a one-size-fits-all approach, we recommend that DOER introduce more flexibility into the Guideline to accommodate a range of beneficial agricultural uses, ranging from row crop production to animal grazing. Specifically, the Guideline should allow landowners to request exemptions from specific provisions of the Guideline that may be targeted at hypothetical future uses if they can demonstrate a history of the particular use to which they plan to put the agricultural canopy. For example, if a family has been raising sheep or dairy cows for fifty years in the same field, the Guideline should not require that family to install an array that is designed to accommodate the cultivation of row crops. Rather than installing an array that will only be optimized to a single type of *hypothetical* future use, the Guideline should allow farmers to optimize the array to be designed to address the *likely* future uses of the field.

Therefore, in addition to the changes we recommend below, we encourage DOER to adopt a streamlined exemption process to ensure that the rigidity of the Guideline does not prevent legitimate dual use projects from going forward.

2. Remove or amend the requirement to maintain shading at no more than 50% of any square foot

The proposed Guideline provides that “all Agricultural Solar Tariff Generation Units must demonstrate that the maximum sunlight reduction from the panels on every square foot of land directly beneath, behind and in the areas adjacent to and within the Agricultural Solar Tariff Generation Unit’s design shall not be more than 50% of baseline field conditions.” This requirement will further reduce the economic viability of Agricultural Solar Tariff Generating Units by potentially requiring suboptimal tilt and tracker designs that will limit the yield that each panel can provide. As with the other provisions we discuss below, this reduction in the value of the solar project will result in an inferior value proposition to landowners relative to a traditional single-use ground mount. This provision alone will no doubt discourage the vast majority of farmers from adopting a dual-use configuration.

Moreover, while the proposed shading requirement may make sense for certain dual uses (e.g., crops that benefit from significant direct sunlight), the requirement is far too restrictive for many other kinds of dual uses, such as raising livestock or growing shade-tolerant crops. For example, we understand that the National Renewable Energy Laboratory is currently studying several dual-agricultural use cases in which increased shading actually provides a benefit to a fruit and vegetable crop production. Similarly, livestock operations may see increased shading as a way to reduce heat

stress on their herds during hot weather while allowing grazing to continue. Given that there may be numerous beneficial dual use applications involving substantially more shading, and that significant further research is required to determine the optimal amount of shading for each application, it would be unwise to adopt a shading requirement that would be suitable only for a single hypothesized land use while being suboptimal for numerous other potential applications.

Consequently, we recommend either deleting this requirement entirely, or amending it such that a project may demonstrate that no more than 50% of the overall field area will be impacted during peak growing hours.

3. Remove the requirement to space individual panels at least 4 feet apart

The Guideline requires that “fixed tilt designs shall include a minimum four feet distance between each panel(s) in order to avoid full shade beneath and behind each row of panels; single- and double-axis tracking systems must demonstrate the 50% sunlight reduction maximum can be achieved without the minimum four feet distance.” As with the shading requirement discussed above, this provision will result in the solar array taking up substantially more space than a typical ground mounted system, without any increase to solar production. This will result in more land being impacted by the solar array, and will also mean that lease rates for the array will need to be substantially lower than for single-use systems (because significantly more land will be required for agricultural canopy projects to receive the same level of compensation as single-use ground mounts). Consequently, this requirement will result in a value proposition to landowners that is inferior to the value provided by leasing their land for a single-use project, and will result in fewer dual-use projects being developed.

For these reasons, we recommend either removing this requirement entirely, or changing it to clarify that the 4-foot requirement would only relate to the minimum spacing between *rows* of panels, rather than the minimum distance between any two *individual* panels.

4. Reduce the minimum height requirements to no more than 6 feet

The Guideline requires that fixed tilt Agricultural Solar Tariff Generation Units have a minimum clearance of 8 feet, with trackers required to demonstrate a minimum height of ten feet. As with several of the other provisions in the Guideline, this requirement would add significant cost and complexity to agricultural canopy projects without any clear benefit for the majority of potential use cases. These heights are significantly higher than would be required for many agricultural uses—e.g., growing root vegetables and many fruits and vegetables; raising livestock such as chickens or sheep, and likely many other viable, legitimate dual use applications.

Consequently, we recommend that the Guideline allow for flexibility in dual use applications by not imposing a height limitation of more than six feet for both fixed tilt and tracker systems.

5. Increase the maximum size of Agricultural Solar Tariff Generating Units to 5 MW

The current Guideline would limit Agricultural Solar Tariff Generating Units to no more than 2 MW for the first two capacity blocks within a distribution company’s territory, with the possibility that this limit could be adjusted for later blocks. In many cases, landowners who are considering going solar will be weighing the option of leasing their land for a traditional ground mount against the

option of leasing their land for an agricultural canopy. The 2 MW limit on agricultural canopy projects, combined with the SMART program's segmentation rules, will mean that farmers would be comparing an offer to lease 2 MW of land for an agricultural canopy against an offer to lease significantly more land for a traditional ground-mounted projects. Given the importance of the income from solar leases to many landowners, it is likely that many landowners will prefer to lease more of their land for a traditional ground mount since the total income to the farmer will be significantly higher than an agricultural canopy lease.

To avoid discouraging landowners from adopting a dual use application, we recommend putting agricultural canopy projects on equal footing with single-use projects by increasing the maximum project size to 5 MW. In addition, in order to avoid discouraging the adoption of agricultural dual use projects, DOER should clarify that the installation of an Agricultural Solar Tariff Generating Unit on the same parcel as a traditional ground-mounted system would not violate the SMART program's segmentation rules, as long as the aggregate size of the system does not exceed 5 MW.

6. DOER should add a streamlined pre-approval process for Agricultural Solar Tariff Generating Units

Given the novelty of the Agricultural Solar Tariff Generation provisions, and the uncertainty about what designs and uses will ultimately be deemed to satisfy the proposed requirements (especially as currently written), we recommend that DOER consider establishing an optional pre-approval process to provide developers certainty that their proposed designs will satisfy the requirements of the program, and to reduce the risk of retroactive changes that could upset developer and landowner expectations. In particular, the role of the "UMass Amherst agricultural extension service" in the development of dual use projects requires significant clarification. Providing greater certainty around the ultimate approval of dual use projects is essential for encouraging developers and landowners to pursue the novel dual use projects envisioned by the regulation.

7. Additional Considerations

In addition to the recommendations above, we recommend the DOER consider additional ways to reduce the administrative burden of the Agricultural Solar Tariff Generating Unit reporting provisions. Many of these provisions could add significant administrative burden to landowners, many of whom may not have the resources to meet potentially onerous reporting rules.

Furthermore, we recommend that DOER work with MDAR to establish a mechanism for allowing appropriate dual use projects to move forward on land that is currently under an Agricultural Preservation Easement. Given the purposes of such easements, we believe it is appropriate to allow responsible dual use projects to be constructed in such areas as a way of facilitating the continued agricultural use of the property.

B. ENERGY STORAGE ADDER GUIDELINE

The Associations strongly supports DOER's inclusion of adders to Base Compensation Rates for certain facility types, including for Solar Tariff Generation units that are co-located with Energy Storage Systems.

In order to capture the many benefits that paired solar and storage systems provide, the Associations submit the following comments on the Energy Storage Adder Guideline.

1. Definition of “Co-Located”

The proposed definition of “co-located” should be revised to allow energy storage systems to participate in the ISO-New England capacity and ancillary services markets. Specifically, the ISO’s rules require that energy storage systems participating as generators demonstrate that they have interconnection rights that are separate from any co-located generating resources (such as a co-located solar generating unit). In practice, this means that ISO-NE may not allow an energy storage system located behind the same common point of coupling as a solar facility to participate in the capacity or ancillary services markets. Rather, co-located resources may need to be interconnected to an adjacent common collector (typically a distribution line section or independent circuit at nominal AC voltage). DOER’s *State of Charge* report and the Department’s explanations of the goals of the energy storage adder clearly envision facilitating use cases in which co-located solar and storage systems would provide wholesale services such as capacity, spinning reserves and frequency regulation.¹ In order to achieve these goals, it is essential that the energy storage guideline not prevent energy storage systems from participating in these ISO-NE markets.

Therefore, DOER should revise the definition of “co-located” to read as follows:

“To be deemed co-located, the Solar Tariff Generation Unit and the Energy Storage System must be located on the same or adjacent parcels, and must be interconnected to the same common collector (i.e. a independent circuit at nominal AC voltage or distribution element that serves no load other than that associated with the parcels on which the Solar Tariff Generation Unit(s) and Energy Storage Unit are located).”

2. Allocation of Capacity within the 80 MW Energy Storage Adder Block

In practice, energy storage projects eligible for the energy storage adder may have capacity that is different from the associated, co-located SMART-eligible solar facility. For example, a customer may decide to co-locate a 10 kW energy storage system with a 20 kW solar array. The SMART regulations do not specify whether the capacity allocated to co-located solar and storage systems within the energy storage adder block would be determined based on the capacity of the *solar* facility or the capacity of the *storage* facility.

In our view, the correct approach would be to allocate capacity within the energy storage block based on the nameplate capacity of the energy storage system. This approach will ensure that each MW of capacity within the capacity block is associated with a MW of deployed energy storage. The alternative—allocating capacity based on the capacity of the paired solar facility—would result in lower deployment of energy storage systems, which appears incongruent with the Administration’s energy storage goals and the design of SMART. Consequently, we recommend that DOER add the following sentence to the energy storage guideline:

¹ See, e.g., *State of Charge* report at 86, 129; DOER presentation entitled “Next Generation Solar Incentive Straw Proposal” (Sept. 23, 2016) at slide 17.

“Capacity within the energy storage adder block will allocated based on the nameplate capacity of the associated energy storage system.”

3. Clarifying Availability of Phased SQ Application for the Energy Storage Adder

In many cases, developers and system owners may need to submit separate interconnection applications for energy storage systems that are paired with solar. For example, customers may decide to add an energy storage system after commencing development of a solar facility (or after completion). For this reason, we support the provision in the draft “Statement of Qualification Reservation Period Guideline” that allows customers to qualify for the energy storage adder at any time. To avoid confusion, we recommend that DOER insert the same language into the Energy Storage Guideline.

4. Clarifying the Definition of “Performance Data”

The proposed Energy Storage guideline includes the following requirement: “Owner of the Energy Storage System must provide historical 15-minute interval performance data to the Solar Program Administrator.” DOER should clarify the meaning of “performance data.” Performance data collections will be limited to the period’s 15-minutes before and 15-minutes after the energy storage system is completely discharged for each of the 52 annual battery cycles. The 15-minute interval data will include battery discharge capacity in order to show compliance with the program rules.

5. Clarifying the Operating Requirements

We generally agree with DOER’s structure for Operating Requirements to objectively confirm that project owners are actively operating and maintaining energy storage systems for the full 20 year term of the SMART program. However, we believe that in practice the requirement that energy storage systems be down for no more that 15% of any 12-month period risks disqualifying projects whose owners are working in good faith to repair or replace system equipment performing below anticipated standards. For that reason, we ask that the 15% downtime threshold for disqualification be subject to an exemption for extended downtime due to equipment failure and/or long replacement equipment lead times.

C. LAND USE AND SITING GUIDELINE

The SMART program introduces an entirely new siting and land use structure to align the goals of encouraging renewable energy development and promoting stewardship of our natural resources and open spaces. While it is unlikely that any single document can anticipate every possible scenario or project configuration, it is imperative that the language be as clear and explicit as possible in order to drive an orderly development. Additionally, please refer to our draft redline of the Department’s draft Guideline, attached as Exhibit A to these comments. Note that the draft redline is illustrative only, and does not necessarily capture the full extent of our requests for clarification or recommended revisions contained herein.

1. Background and Purpose

This section should specify that capitalized terms are defined as they are in 225 CMR 20.

2. Category 1

Category 1 is divided into Agricultural and Non-Agricultural. The test for Agricultural status includes whether the STGU

*“is sited on **active** agricultural land, **Prime Agricultural Land**, or land that is currently or has in the past five years, enrolled in the Chapter 61A tax benefit program”* [emphasis added].

SMART regulation does not include the term “active” in its description of Land in Agricultural Use, which is defined explicitly as land subject to Chapter 61A within the previous five years and Prime Agricultural Farmland only. ““Active” is not a standard that is easily qualified or measured, particularly due to natural cycles of farming (crop rotation, fallow periods, water allocation, etc.). We recommend that the “active” qualifier be removed, and that the Guideline be revised to maintain consistency and rely on the definitions already established in 225 CMR 20.00 (including, that “Prime Agricultural Land” should read “Prime Agricultural Farmland” to conform to the underlying regulation and the USDA definition).

Prime Agricultural Farmland

For prospective STGU owners to identify such lands, the draft Guideline suggests that “MassGIS Oliver can be used to see land that is categorized as Prime Agricultural...”. While we recognize that this issue has been discussed at length and the definition is in the underlying final regulation, the Associations want to reiterate that using Oliver data layers is a problematic and imprecise siting policy, and is not intended to guide specific siting decisions. Notably, the MassGIS Oliver website explicitly states, *“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.”* There are many sites that would exceed the Department’s standard for “previously developed”, or that have been designated by municipalities as areas explicitly zoned for solar generation that would not qualify for Category 1 treatment due to being classified as Prime Agricultural Farmland on MassGIS Oliver. There are ample examples of where paved, excavated, or significantly altered land, including open and active gravel pits, are mapped as prime farmland soils and therefore would be considered Prime Agricultural Farmland pursuant to the SMART regulations. Having a Department standard or local zoning ordinance superseded by a standard that is not applied anywhere else in statute or regulation based on data not controlled by the Commonwealth is problematic policy.

The Department has expressed that it would consider exceptions in the event that a property is disqualified for Category 1 when there is evidence that the classification of Prime Agricultural Farmland is incongruous with actual site conditions. The Associations anticipate this will be a common occurrence and requests that the Department consider including an application for a good cause exception specifically for cases in which parcels meet all other Category 1 criteria, but may be inappropriately classified as Prime Agricultural Farmland.

Agricultural Preservation Restriction

The Associations request that the DOER clarify the treatment of projects proposed on land currently under the Agricultural Restriction (APR) pursuant to 320 CMR 22. The Associations suggest that any STGU proposed within an APR which is sized to meet in excess of 200% of the annual operation load

of an agricultural facility must first be removed from the APR, but otherwise should not be precluded from qualifying for Category 1 treatment.

Previously Developed

The definition in the Guidelines should match the language in 225 CMR 20.05(5)(e):

“previously developed shall mean having pre-existing paving, construction, or altered landscapes, and does not include altered landscapes resulting from current agricultural use, forestry, or use as preserved natural area.”

The draft Guidelines seem to include a higher standard for meeting “previously developed” than what is indicated under the SMART regulations, which states:

For the purposes of 225 CMR 20.05(5)(e), previously developed shall mean having pre-existing paving, construction, or altered landscapes, and does not include altered landscapes resulting from current agricultural use, forestry, or use as preserved natural area.

The Guidelines include “deforestation” as a use that will not be considered as previous development. This addition is unnecessary and vague, as “deforestation” is not defined and could be the result of any number of circumstances and use cases. Practically speaking, it is unclear how a landscape could be in a current state of “deforestation”, since presumably, any developed parcel has been “deforested” at some point.

The Associations request DOER further clarify what will constitute “previously developed” for the purposes of SMART by providing objective standards and clear examples (i.e., cleared land that has not been used for agriculture or forestry in the past 5 years, golf courses, abandoned mines) that align with the Regulations. In determining “how is previously developed defined,” the second paragraph of the Guideline ends with the sentence, “[t]he site must have existing development at the time the STGU submits a Statement of Qualification Application”; however, the Regulations only describe the historical use of the parcel and do not require existing structures to be in place. Massachusetts is an old state and paving, foundations, and other markers of development may have crumbled or been carted off in the interim. We ask that this sentence be struck from the Guidelines.

Further, for the purposes of determining whether a site is “previously developed”, the Guideline should be more specific. For example, it is not clear how the Department will determine what constitutes the “site” vs. the “parcel”, especially at the time of a Statement of Qualification Application submission. The Associations suggest that DOER clarify whether the “site” will be defined as the proposed lease/purchase area (or, in the case that the STGU Owner is the parcel owner, the parcel area). In the event that the previous development occurred on only a portion of the site, there also seems to be no clear standard in place for confirming that the STGU would be considered to be sited on previously developed land, but it would seem to meet the definition. The Associations request that DOER confirm this interpretation.

Solar Overlay District

225 CMR 20.05(e)(b)(vi) qualifies as Category 1 ground mounted projects that:

“are sited within a solar overlay district or that comply with established local zoning that explicitly addresses solar or power generation.”

The Regulation as filed is sufficiently flexible to account for the multitude of different zoning terms and practices in place in the 351 communities of the Commonwealth; however, the Guidelines contradict the language in the regulation by specifying that “[i]f a project needs to seek a variance, special permit, waiver or other discretionary approval, it would not qualify under this categorization.”

The Guidelines reflect a critical misunderstanding of the nature of zoning in Massachusetts and negate the intent of the Regulations by effectively excluding projects located in towns that have taken a proactive approach toward permitting solar. Local jurisdictions use zoning to designate the type of development they want to see in a certain area, but employ special permits, site plan approvals, and other discretionary land use permits to provide an opportunity to condition projects with project-specific requirements. For example, by zoning an area of a town “Agricultural”, the town has declared that the intended use of that area is for farming/agricultural activity; however, the town may still wish to require barns, large animal farms, chicken coops, crop-storing warehouses, etc. to be subject to additional discretionary review. In industrial/manufacturing zones, almost all actual facilities (including power plants and manufacturing facilities) would still require a special permit because the local jurisdiction would want to have oversight on how the facility is designed and constructed. Therefore, a solar project that requires discretionary permit(s) could still be located within “local zoning that explicitly addresses solar” as required to qualify for Category 1 pursuant to the Regulations.

There are several examples of Massachusetts towns that have deliberately and thoughtfully addressed solar development in their local ordinances and bylaws, and have established robust public processes to ensure that solar development is consistent with adjacent land uses. For example, the towns of Carver, Leicester, and Spencer – each of which have adopted ordinances designed to promote the adoption of solar energy – all require certain solar projects to go through a special permit process.² Each of these municipalities’ ordinances clearly state their intention to facilitate the installation of solar, with appropriate conditions. It would be unreasonable for DOER to second-guess these municipalities’ reasoned decisions by automatically penalizing projects with Category 3 treatment simply because their solar siting policies require some kind of additional diligence and discretion on the part of the town. In fact, the DOER’s model bylaw acknowledges that approval by special permit can be appropriate for larger solar facilities, especially in residential areas.³

Furthermore, the term “other discretionary approval” is vague as it could be construed to mean that any level of required approval - conservation commissions, historic districts, neighborhood associations, etc. could disqualify a project from Category 1 treatment. Prohibiting variance permits

² See <https://www.carverma.gov/sites/carverma/files/uploads/zoningbylaws.pdf> Sec. 3580.00 et. seq. (Town of Carver); http://www.spencerma.gov/Pages/SpencerMA_Dev/ZoningBy-law.pdf Art. 4.8.9 (Town of Spencer);

https://www.leicesterma.org/sites/leicesterma/files/uploads/2017_leicester_zoning_bylaw_final.pdf Sec. 5.14 (Town of Leicester).

³ <https://www.mass.gov/files/documents/2017/10/16/model-solar-zoning.pdf>

is particularly cumbersome since variance permits are only granted for minor deviations (e.g., a fence height that is one foot higher than the typical allowed fence height in the zone). Variances cannot be for something substantive that would warrant a zone change or special permit.

In order to meet the standard set in the SMART Regulations and to recognize the diversity of municipal zoning processes, we recommend that DOER revise the Guidelines to mirror the existing regulatory language, and to clarify that as long as a local jurisdiction's land use regulations, ordinance, and/or bylaws explicitly address solar, the project and town should qualify for the exemption from the land use subtractor--regardless of the type of permitting process utilized by the municipality.

Finally, the Companies request that the Guidelines specify when in the development process the determination of zoning is "set". For instance, additional guidance is needed to address the event that the permitting path is modified due to a change in the zoning ordinance (i.e., a town adopts a zoning amendment to incorporate a specific reference to solar) between the time of submitting a statement of qualifications application and the time of receiving zoning approval. .

3. Category 2

As with the previous section, the guidelines should be responsive to the diversity of zoning structures in the Commonwealth. There are a number of designations, some unique to just one town, that would meet the Department's goals for thoughtful siting, but due to particularities of the town are not designated either "commercial" or "industrial"⁴. Rather than proscribe what towns must call their designations to avoid the full subtractor, it may be easier to describe what should not qualify as Category 2 – namely, parcels that are zoned for agricultural or residential use.

The guidelines should specify that Category 1 considerations supersede Category 2. For example, parcels can be zoned as commercial or industrial and allow solar by right per the town code. It will be important to clarify that this type of project will fall into Category 1. The same is true for the qualifier "has not been previously developed." If a site has not been previously developed, but is located within a solar overlay district or zoned by right per town code, the project should fall into Category 1.

Greenfield Subtractor Calculation and Application

The Associations appreciate the specificity in the Guidelines as to how the subtractor is calculated and request further clarification regarding when DOER requires a final module count, what information is required from the developer to evidence the module count and size, and how adjustments are handled to accommodate design change. Because the Greenfield Subtractor is determined based on the square footage of the modules, this calculation will be dependent on the final project design and equipment procurement, which is typically not available until a project commences construction. We suggest that the Statement of Qualification will identify the applicable

⁴ For example, Amherst has a "Professional Research Park" zoning designation: <https://www.amherstma.gov/zoningprimer>

land use category for the STGU, and that the final calculation of the Greenfield Subtractor will be confirmed by the Solar Program Administrator prior to the Commercial Operation Date.

4. Project Segmentation

As drafted, the Project Segmentation rules and exemptions seem too nebulous for meaningful interpretation as a means to guide development practices. For example, the criteria pertaining to Building Mounted STGUs appears to be self-contradictory by providing an exemption for STGUs smaller than 25 kW (AC), while also providing that exemption to *all* STGUs on a single building, provided they are separately metered. In general, the Associations request that the language be rewritten to define all intended exemptions to the Project Segmentation with greater clarity so that they may better guide developer decisions.

Eligible STGU Projects

For clarity, the draft Guideline should specify that only one of the listed conditions are required to be met in order to qualify for an exemption to the project segmentation restrictions.

The regulation and the Guideline prohibits projects on the same or contiguous parcels unless a “STGU submits a Statement of Qualification Application at least 12 months after the Commercial Operation Date of the original STGU”. However, Commercial Operation Dates are exceedingly difficult to predict and would leave developers at the mercy of utility upgrades or any other innumerable potential delays. We recommend the 12-month clock begin at the date of the Statement of Qualification Application of the original STGU.

Another exemption to the project segmentation restrictions applies if a STGU “can demonstrate to the Department’s satisfaction that the Owner is unaffiliated from the Owner of the original STGU”. Projects can change owners several times throughout the course of development and construction and after the Commercial Operation Date. Additionally, due to the nature of the tax equity market, many projects receive financing from the same small number of available financiers. These financiers receive equity (i.e., “ownership”) in the project in exchange for their financial contribution. Project segmentation rules cannot restrict the ability of STGU owners to finance or otherwise transfer their assets. Using the underlying ownership of the land, rather than the solar project owner, as the criteria for this restriction would largely solve this problem, as this is more unlikely to change throughout the development process in a way that would put development assets at risk.

Definition of contiguous

The Associations appreciate DOER’s interest in clarifying how “contiguous parcels” will be determined; however, this determination needs to align with standard real estate practices, and most importantly, should not limit the property rights of unaffiliated neighboring landowners.

Contiguous land should only refer to land with the same fee owner entity that shares a border. (Contiguous parcels with separate fee owners should be exempt in order to avoid limiting a neighbor’s property rights.) It should not include separate parcels with the same owner separated by a public right of way, public right of way reservation, exclusive easement, or waterway.

Contiguous land restrictions should only apply to parcels with the same fee owner that are separated by a private road or non-exclusive easement.

5. Multi-Product Sites

The Associations appreciate this opportunity to reiterate to the Department that, under SMART, there is likely to be an increase in the development of “multi-product sites”, particularly as related to solar co-located with Energy Storage Systems. We implore the SPA to take this reality into consideration as it develops and refines the application process, to enable a streamlined and transparent SQA review process that takes into account the various potential project configurations.

D. STATEMENT OF QUALIFICATION RESERVATION PERIOD GUIDELINE

In addition to a straightforward application process, transparent and objective standards for obtaining and retaining a Statement of Qualification will be critical for a functional SMART Program. In order to ensure that goal, the Associations submit the following comments on the Statement of Qualification Reservation Period Guideline. Additionally, please refer to the draft redline of the Department’s draft Guideline, attached as Exhibit B to these comments. Note that the draft redline is illustrative only, and does not necessarily capture the full extent of our requests for clarification or recommended revisions contained herein.

1. Initial Reservation Period for Project Implementation

In the development of the SMART program, DOER was able to draw on lessons learned during the implementation and operation of the SREC programs. SEIA applauds the Department’s recognition that the 9-month initial Reservation Period instituted under 225 CMR 14.00 generally provided insufficient runway for qualified non-residential projects to achieve commercial operations. Therefore, SEIA supports the expansion of the initial Reservation Period to 12 months under SMART.

Relatedly, the experience under Massachusetts’ SREC programs clearly established the fact that actual commercial operations dates rarely align with the completion of construction for non-residential installations. To account for this reality, DOER effectively established a “mechanical completion” standard, whereby qualified generation units would receive an indefinite extension pending Authorization to Interconnect; more specifically:

...it can be demonstrated to the Department’s satisfaction (including but not limited to an Affidavit from the Engineer of record that the system is mechanically complete) that substantially all of the solar equipment on the End-Use Customer’s side of the local distribution company’s meter, including panels, inverters, ballasts, or other mounting equipment, has been physically constructed and all payments due to the local distribution company under the interconnection service agreement have been paid as and when due.⁵

⁵ See 225 CMR 14.00 Final Guideline: “RPS Solar Carve-Out II Extensions” issued August 31, 2016.

It seems clear that the onset of the program is the appropriate time to codify the mechanical completion standard for STGUs under SMART. Such a standard can be applied to Small Solar Tariff Generation Units and Large Solar Tariff Generation Units alike. We therefore recommend that projects which achieve Mechanical Completion during the Reservation Period receive an Extended Reservation Period under Section 6(c) of the Guideline. Doing so would provide some much-needed clarity to developers and financiers as to the standards for retaining a Statement of Qualifications for a given STGU.

2. Determining of Queuing Order and Application Periods

In any declining-block style program, it is critically important that a sensible queuing mechanism is established and enforced. Applicants must have a clear understanding of the parameters by which STGUs will be reviewed, and those standards must be consistently applied. It is also evident, however, the review process for more complex projects may occasionally require that the SPA seek additional information from STGU applicants, as outlined under 225 CMR 20.06(2). Therefore, it is important that the Guideline clarify that a queue position is established at the time of the original Statement of Qualification Application, provided that the application is ultimately determined to be administratively complete by the SPA. Further, the Associations urge DOER to confirm that no capacity in any block will be allocated to any application not ultimately deemed complete by the SPA.⁶

The Associations fully expect that a significant backlog of projects will exist as of the current anticipated effective date of the SMART program, especially given the extended functional gap for many developers between the SREC II and SMART programs. Therefore, the Initial Application Period will require a “tiebreaker” system which objectively rank-orders SQAs based on well-established development milestones. While the ordering proposal adopted by DOER in the Guideline inherently involves elements of third-party control (Primary Installer for Small Solar Tariff Generating Units, and the Distribution Companies for Large Solar Tariff Generating Units), we generally agree with the intent and design of the ordering provision. The Associations also encourage DOER to consider a higher standard for Large Solar Tariff Generating Units, such as by establishing queue position based on the date which the STGU has met the documentation requirements under 225 CMR 20.06(1)(c), should it determine that doing so would result in a more equitable or objective ordering of STGUs.

In order to mitigate administrative burdens and facilitate an orderly transition we implore the SPA to make the application process available to prospective Solar Tariff Generation Units as soon as practicable, preferably prior to the final DPU order on the SMART Tariff if deemed feasible by the relevant stakeholders.

3. Complete Statement of Qualification Application

Because the requirements under 225 CMR 20.06 are ultimately dependent on any other guidelines thereto, the Statement of Qualification Reservation Period Guideline must make explicit reference to those guidelines, particularly as it relates to the determination of a “complete” application. Further, the Associations request that DOER be more specific with regard to the expectations

⁶ The process for obtaining a cap allocation under MassACA can serve as an appropriate model here.

around the application fee required by the Solar Program Administrator. While the SMART Program does reference a performance guarantee deposit for STGUs under the one-time competitive procurement, not to exceed (and ultimately set at) \$25 per kilowatt, it is otherwise silent about any application fee for STGUs seeking a Block Allocation. DOER should establish similar clear parameters and utilize similar terminology for any application fee. Therefore, the Associations recommend that DOER clarify when the application fee (or performance deposit) is due (either upon submission of the SQA or upon a determination that the SQA is otherwise administratively complete, similar to MassACA), and work with the SPA and DPU to announce the amount of the performance deposit as soon as possible, so developers can plan accordingly.

Additionally, several of our member companies have suggested that the Statement of Qualification Reservation Period Guideline is the appropriate instrument by which to clarify whether multiple STGUs may apply under a single Statement of Qualification Application. If not, we request that the Department confirm that a single ISA can be utilized for multiple STGU SQAs in the event that multiple Generation Unit Types have applied for a single interconnection application.

4. Cure Process

In order to be effective and ensure the integrity of the SMART Program, the SQA review process needs to remain as objective as possible. While technical “foot faults” and honest mistakes should not preclude block allocations for substantively complete SQAs, applicants should also be absolutely confident that their projects meet the requirements of 225 CMR 20.06 at the time of submission. Through this Guideline, DOER needs to clearly distinguish between “deficient” SQAs, and those which may simply require further clarification or additional supporting documentation.

If an application is truly deficient, because it has either not obtained or failed to submit the documentation required under 225 CMR 20.06 (and any corresponding Guidelines), the SPA should mark the application “Incomplete” and the STGU should not retain a queue position.

However, if the SPA simply requires clarification on any SQA documentation, or requires additional supporting documentation to confirm information or representations made through an SQA, the STGU should retain a queue position until the applicant complies with the SPA request and a determination can be made that the application is “Complete”.

Given the natural time-sensitivity involved in a first-come, first-served declining block program, it is critical that the SPA conducts all SQA reviews and customer communications with promptness and urgency. In any event, the SPA should require no longer than [10] business days to make its determination and notify the developer.

5. Extended Reservation Periods

The Associations generally agree with the extension provisions proposed by DOER under Section 6 of the Guideline, with the following comments:

- (a) Extended Reservation Period for a Fee: The Associations would like to reiterate that any fees related to the SQA should be fixed and communicated as quickly as possible. In order to receive an extension under this subclause (a), applicants should be actively pursuing development and construction of the facility, and should be prepared to

provide evidence. Additionally, any the fee should be reimbursable to the STGU upon Mechanical Completion.

- (b) Extended Reservation Period for Legal Challenges: Provided that an applicant can demonstrate that all governmental permits and approvals were valid and in good standing at the time of the original SQA submission, applicants should clearly be entitled to reasonable extensions for legal challenges to those permits or approvals. However, the requirement that “the legal challenge remains pending”, as currently drafted in the Guideline, creates the possibility of an inconsistent application of an otherwise thoughtful extension provision. For example, an STGU facing a legitimate legal challenge which prevents the responsible construction of the facility in question should not be precluded from utilizing this extension provision by virtue of the legal challenge being resolved in the final month of the Initial Reservation Period. Instead, and especially because the DOER has the discretion to extend the Reservation Period for *up to* six months, an STGU applicant should only be required to demonstrate that the legal challenge was ongoing during the Reservation Period.
- (c) Extended Reservation Period Pending Authorization to Interconnect: As discussed in comments to section 2 of the Guideline, above, all STGUs should be entitled to an Extended Reservation Period Pending Authorization to Interconnect provided that the STGU achieves mechanical completion within the Reservation Period. In addition to providing a Certificate of Completion, other documentation deemed satisfactory to DOER should be acceptable for the purposes of satisfying the requirements of an extension under Section 6(c) of the Guideline.

6. Adder Eligibility and Qualification

The Statement of Qualification Applications must allow applicants to clearly indicate which Compensation Rate Adders they intend to pursue. In order to obtain financing for a Solar Tariff Generation Unit relying on one or more Compensation Rate Adders, it is of critical importance that Statement of Qualification issued by the Department confirms the eligibility for such adders and outlines the conditions for retaining eligibility. The Guideline and, in turn, the Statement of Qualification Application process, should be unambiguous in establishing the conditions for receiving payment based on any Compensation Rate Adders. Unfortunately, the current draft of the Guideline seems to introduce unnecessary confusion and circularity to a process that requires transparency and precision.

For example, STGUs applying for certain Location Based Adders, such as Agricultural Solar Tariff Generation Units or Solar Tariff Generation Units on a Brownfield, will have clear guidance (in the form of separate Guidelines) establishing the conditions for adder eligibility. However, it is difficult to ascertain how the Department or the Solar Program Administrator intends to confirm “*proof of adder eligibility*” for a Building Mounted Solar Tariff Generation Unit, Floating Solar Tariff Generation Unit, or Canopy Solar Tariff Generation Unit at the time of the Statement of Qualification Application. Where no explicit additional documentation is required, the Department should be clear that the applicant *is* eligible for the applicable Location Based Adder, provided that the STGU meets and maintains the requirements established under the SMART regulations.

Similarly, it isn't clear how an STGU seeking eligibility for the Solar Tracking Adder would demonstrate "*proof of adder eligibility*", except by virtue of installing a facility that utilizes technology consistent with the criteria established in 225 CMR 20.07(4)(d). The Associations recommend that the Department amend the Guideline, or issue a separate Guideline, to clarify that the SPA or the Department will certify that a proposed design or technology for STGUs seeking the Solar Tracking Adder.

The Guideline introduces comparable challenges for Offtaker-based and Energy Storage Adders. While the Associations appreciate that eligibility for certain Compensation Rate Adders (Off-Taker Based and Energy Storage Adders) may be obtained following the Commercial Operation Date of an STGU, Owners and financiers cannot be expected to put substantial capital at risk under SMART without reasonable certainty as to the Adder Value available to the STGU. To that end, the Adder Value for any Compensation Rate Adders should generally be established at the time the STGU *initially* qualifies for the applicable adder and should not be subject to change based on the Commercial Operation Date of the STGU which is often outside the control of the Owner.

With regard to Offtaker-based Adders, it is impractical to expect that an STGU can or should demonstrate "*proof of adder eligibility*" or "*continued compliance with the eligibility criteria*" prior to its Commercial Operations Date, and it is unreasonable, for example, to expect an STGU to obtain construction debt and tax equity on the promise of an Off-taker Based Adder Value that is subject to change based on DOER review. However, it is similarly unreasonable to expect that an STGU Owner, to use the example of a Community Shared Solar Tariff Generation Unit, should have to obtain all customers upon the Statement of Qualification Application, only for those customers to wait 12-18 or more months to begin receiving credits (Commercial Operation Dates being largely outside the control of the Owner). It would be disruptive to the industry if a STGU is unable to confirm its *eligibility* for a given Offtaker-based Adder (and value) until such a time that it can demonstrate compliance with the relevant Generation Unit Type (e.g. Community Shared Solar Tariff Generation Unit, or Low Income Property Solar Tariff Generation Unit). Instead, an applicant should select the appropriate Offtaker-based Adder (if any) with the initial the Statement of Qualification Application, and commit to securing off-takers in order to meet the eligibility criteria. The resulting Statement of Qualification should confirm eligibility and the conditions for the STGU to retain the applicable Adder eligibility, including any deadlines by which the STGU must demonstrate compliance with the eligibility criteria. This is similar to the method currently utilized under SREC II, which has proven to be acceptable to developers and financiers alike, and may offer a sensible model for SMART⁷. However, the Associations recognize that, due to the declining-block structure of the SMART Program – including the adder tranches – there would need to be means to prevent "squatting" on adder tranche capacity, which could be the natural incentive for STGUs. We urge DOER to thoughtfully consider to best way to balance practical market realities, including financing, with the need to prevent gaming. We welcome to opportunity to work with DOER staff, the SPA, and other stakeholders to determine the most sensible solution, which could include performance standards (or additional performance deposits) for any STGU seeking Off-taker Based Adders.

⁷ An applicant represents on the SQA that a project is a certain Generation Unit Type (i.e. CSS), and eligibility is confirmed on the Statement of Qualifications with conditions for retaining the applicable Market Sector (and SREC Factor) treatment. A similar process should be applied under SMART.

For Energy Storage Adders, the Associations direct the Department to our comments on the Energy Storage Guideline. Further, we request that the Department clarify that an STGU shall be deemed eligible for the Energy Storage Adder provided that the Statement of Qualification Application includes an Interconnection Service Agreement(s) which demonstrates that an STGU is co-located with an Energy Storage System. Additionally, the Associations seek clarification as to whether a single Energy Storage System can but utilized for multiple STGUs, and how DOER might determine (and calculate) Energy Storage Adder eligibility in such a scenario.

6. Multi-Product Sites

The Associations appreciate this opportunity to reiterate to the Department that, under SMART, there is likely to be an increase in the development of “multi-product sites”, particularly as related to solar co-located with Energy Storage Systems. We implore the SPA to take this reality into consideration as it develops and refines the application process, to enable a streamlined and transparent SQA review process that takes into account the various potential project configurations. As solar plus storage systems are not yet common in Massachusetts, there is not yet streamlined documentation relating to utility interconnection. We urge the Department to build in flexibility for this in the application process, such as submitting multiple interconnection agreements to the Program Administrator.

7. Compliance with the SMART Tariffs

While we cannot reasonably expect the Department to detail all scenarios under which an STGU may be determined to be non-compliant with the SMART Tariff, the Associations does urge the Department to clarify the conditions and resulting process for any such determination. Further, it is our clear expectation that *only* the Department of Energy Resources may exercise any authority with respect to a suspension or revocation of a Statement of Qualification. Given the extreme variability in potential causes for such a determination, the Associations strongly recommend that the Department adopt a cure provision for STGUs under this Guideline, so that circumstances may be evaluated on a case by case basis and reasonable outcomes can be secured.

E. Low Income Generation Units Guideline

The Associations are concerned by the regulatory definitions in the document as well as the lack of guidance on how Alternative On-bill Credit Generation Units (AOBCs) can qualify for the relevant low income adders available under SMART.

As written, the SMART Guideline on Low Income Units prevents Massachusetts public housing authorities with developments funded by HUD from being eligible for the full 230% of base rate incentive if they are master-metered and on a commercial rate. This issue arises from the language in the guidance citing the requirement that a low income customer is defined as “An End-use Customer that is on a low-income discounted rate of a Distribution Company.” Many public housing authorities in Massachusetts are master-metered but are housing 100% low income eligible households. If a low income customer is defined as either an end-use customer that is on a low-income discounted rate of a Distribution Company or a household meeting the income eligibility guidelines and residing in a public housing authority, then these public housing authorities could qualify for the 230% incentive. For those

public housing authorities on commercial rates, many of which have buildings that fall into the less than 25 KW category, they cannot take advantage of the low income property adder.

Additionally, the added hurdle of gaining HUD approval, certainly for an energy performance contract situation where on-site solar is being developed, prior to completing plans for interconnection, creates a timing burden that will likely prohibit their participation at all in the SMART incentives.

The Associations urge DOER to consider the comments submitted by Boston Community Capital before the Low Income Guideline is finalized and provide greater clarity and flexibility with respect to how AOBCs can qualify for relevant low income adders.

Conclusion

We appreciate the hard work by DOER, EEA, and MDAR to design guidelines to an innovative successor solar incentive program. However, we strongly recommend that DOER make these essential changes to the guidelines. Without these modifications, we believe the critical SMART program will fail to create the conditions necessary to meet Administration's laudable goal of 1,600 MW of new solar capacity. Adopting our recommendations will help ensure that Massachusetts maintains its place as a national leader in clean energy. Thank you for considering these recommendations.

Yours sincerely,



David Gahl
Director of State Affairs, Northeast
Solar Energy Industries Association
dgahl@seia.org



Jeff Cramer
Executive Director
Coalition for Community Solar Access
jeff@communitysolaraccess.org



Janet Gail Besser
Executive Vice President
Northeast Clean Energy Council
jbesser@necec.org



Mark Sylvia
President
Solar Energy Business Association of New England
msylvia@bluewavesolar.com



Nathan Phelps
Program Manager - DG Regulatory Policy
Vote Solar
nathan@votesolar.org