



April 2, 2018

Avid Solar appreciates DOER's effort to involve the solar community in the development of the SMART participant "Disclosure Forms" that must be provided to SMART participants for STGU's with a capacity of 25 kW-AC or less, as well as for Low Income and other participants in Community Solar projects.¹ Based on Avid Solar's discussions with DOER representatives, we understand that the intention for this disclosure form, which was not a requirement of the prior SCO production incentive programs, is to meet several goals, including, but not limited to a primary goal of informing participants ***before they sign a contract***, in a summarized and standardized manner, key information about their solar agreement to aid potential participants in making better

¹ See SMART regulation: **225 CMR 20.06 (1) (b)**

4. Customer Disclosure Form. Prospective Solar Tariff Generation Units with a capacity of 25 kW or less must submit a copy of a customer disclosure form signed by the Owner as part of its Statement of Qualification Application. The customer disclosure form will be developed by the Department to provide consumer information including, but not limited to, contract pricing for the length of the agreement, complete system cost information, operation and maintenance responsibilities, disposition of associated RECs and tariff terms, and anticipated production. If the Solar Tariff Generation Unit Owner is a Third-Party Owner, the form must be signed by the Customer of Record.

See also SMART regulation: **225 CMR 20.06 (1)**

(f) Special Provisions for Low Income Community Shared Solar Tariff Generation Units. In order to qualify as a Low Income Community Shared Solar Tariff Generation Unit, a Solar Tariff Generation Unit must submit satisfactory documentation to the Department as detailed in the Department's Guideline Regarding Low Income Generation Units. Additionally, the Owner or Authorized Agent of a prospective Low Income Community Shared Solar Tariff Generation Unit must submit a copy of a customer disclosure form signed by each Customer of Record receiving electricity or bill credits generated by the Low Income Community Shared Solar Tariff Generation Unit as part of its Statement of Qualification Application. The customer disclosure form will be developed by the Department to provide consumer information including, but not limited to, contract pricing for the length of the agreement, complete system cost information, operation and maintenance responsibilities, disposition of associated RECs and tariff terms, and anticipated production. The Low Income Community Shared Solar Tariff Generation Unit Owner or Authorized Agent must provide updated customer disclosure forms for any new Customers of Record that receive electricity or bill credits generated by the Low Income Community Shared Solar Tariff Generation Unit after it is granted its Statement of Qualification. These updates must be provided annually by no later than December 31st.

See also SMART regulation: **225 CMR 20.06 (1)**

(i) Special Provisions for Community Shared Solar Tariff Generation Units. The Owner or Authorized Agent of a prospective Community Shared Solar Tariff Generation Unit must submit a copy of a customer disclosure form signed by each Customer of Record receiving electricity or bill credits generated by the Community Shared Solar Tariff Generation Unit as part of its Statement of Qualification Application. The customer disclosure form will be developed by the Department to provide consumer information including, but not limited to, contract pricing for the length of the agreement, complete system cost information, operation and maintenance responsibilities, disposition of associated RECs and tariff terms, and anticipated production. The Community Shared Solar Tariff Generation Unit Owner or Authorized Agent must provide updated customer disclosure forms for any new Customers of Record that receive electricity or bill credits generated by the Community Shared Solar Tariff Generation Unit after it is granted its Statement of Qualification. These updates must be provided at least annually by no later than December 31st.

informed decisions. Many of the Disclosure Form requirements reflect feedback that DOER has received over the years from customers and others regarding confusion, dissatisfaction, uncertainty and disputes regarding these key contract terms with solar service providers and contractors, as well as with certain responsibilities after a contract is signed.

Avid Solar notes that these Disclosure Forms are **not** being proposed as a “marketing disclosure” form, akin to what was recently developed to guide the marketing activities for Competitive Energy Suppliers, whereby certain information was required to be presented in a standardized way to help better compare the offerings from competitive providers. As such, these forms will **not** be required nor likely provided as **proposals** are made to potential SMART participants, which might assist customers in choosing the proposed solution that best meets their needs using standardized terms and formatting to make comparisons easier.

Avid Solar also notes, confirmed by our discussions with DOER, that the Disclosure Forms will not be additionally used for input into the Statement of Qualification Application (“SQA”), even though Disclosure Forms include most of the information that will be required for SQA, except for certain technical information (e.g., azimuth, tilt, type of mounting). The Disclosure Forms, therefore, will require a lot of redundant information, adding to the overhead burden associated with participating in the SMART program. Moreover, DOER does not intend to provide a digital platform for the creation of the Disclosure Forms (perhaps like the Mass Solar Loan application portal process) that allows installers to enter the data once for multiple purposes and offering an electronic signature process, potentially enabling a combined Disclosure and SQA process. DOER noted a potential logistical issue when discussing such a solution: the Disclosure Forms are meant to be provided to potential SMART participants **before** they sign an agreement to ensure that participants are well informed regarding the key terms of an agreement before they execute it, whereas the SQA process follows the execution of the agreement.

Avid Solar agrees with DOER that a well-informed customer will generally make a better decision, which will lead to fewer disputes after an agreement has been signed. Avid Solar also recognizes that certain contract terms and conditions may be hard to understand or buried in the “fine print” of an agreement. Furthermore, Avid Solar professes that many customers and many contractors and sales people of community solar arrangements, do not fully appreciate and understand the complex production incentive regulations nor the utility tariffs that complement them, including the risks and uncertainties of them. Finally, there are important Massachusetts contractor laws, building and electrical regulations, and financial laws and regulations that guide solar contractors and developers in how they are supposed to conduct their business, deliver their solutions and service their customers in Massachusetts.

The proposed Disclosure Forms that were drafted by DOER for comment address (a) some key terms of the agreements between SMART participants and their providers/contractors, (b) some regulations that govern the relationship between them and how businesses must operate in Massachusetts, and (c) some areas of responsibility for service, maintenance and warranty work, generally after the PV system is operational. The Disclosure Forms are also intended to be shared before a SMART agreement is executed, and the forms are intended to be signed by both the participant and provider/contractor to demonstrate that both parties agree to the accuracy of the information in the Disclosure Form, even though the regulation only requires the consumer/customer to sign the form and attest to its accuracy.

Avid Solar's Recommendations

Avid Solar offers the following recommendations to better serve potential SMART participants and lower the overhead costs associated with the SMART program:

- **Create an electronic Disclosure Form, combined with the Statement of Qualification Application.** The Disclosure Form should be combined into a single online form that captures the minimal information required by the SMART regulation 225 CMR 20 while simultaneously capturing the additional technical information required for the complementary SQA form. DOER must strive to improve the efficiency (cost and time) of the SMART participation process, reducing redundant data entry as much as possible, and making the process electronic and integrated as much as possible. SMART participant agreements could possibly be required to include a clause stipulating that it is contingent on both parties signing off on the combined Disclosure Form & SQA, although Avid Solar notes that the SMART regulation does not authorize DOER to require such a contract clause at this time. Additionally, a digital signature should be the default option for signing this electronic document. Finally, if possible, this same data should be shared with the respective utility to minimize any additional redundant data entry requirements that may be required by their interconnection and net metering application processes.

Avid Solar notes that the overhead associated with the MA incentive programs is significant due to their complexities and associated paperwork. MA overhead costs cause PV installations in MA to be higher than the national average, and the average of some of our neighboring NE states. Such relatively fixed overhead caused by the Disclosure Forms makes the \$/W cost of smaller PV systems significantly more expensive, creating a very regressive incentive program that makes it harder for people of low- and moderate-income with needs for smaller PV systems to participate in SMART. As Avid Solar noted in its prior SMART regulation comments, and as proven in system size cost data maintained by DOER, there can be a 40+% cost difference between a 2.5 kW PV system and a 25 kW PV system, yet the state's incentive program is the same (\$/kWh rate) for both. Avid Solar offered a solution to help address the finer graduation of system costs (i.e., economies of scale) within the ≤ 25 kW system segment of SMART, but DOER did not respond with a solution to this significant disparity in the economics of PV systems between the owners of smaller and larger system. Adding additional administrative overhead to serving system owners in the ≤ 25 kW segment adds insult to injury for the smallest of the SMART participants.

- **Substitute most of the consumer protection & education content in the draft forms with improved pre-sale guides from DOER and MassCEC.** DOER should invest in the development of better consumer educational material, working with MassCEC to produce an updated Consumer Solar's Buyer Guide² that addresses customer-owned PV systems, third-party owned behind-the-meter PV systems, and Community Solar participation options. The updated Buyer's Guide(s) should be complemented with a consumer-oriented SMART guide that explains SMART and its associated utility tariffs in laymen's terms. The SMART Guide can address much of the RPS matters currently covered in the draft Disclosure Forms.

DOER and MassCEC are perceived as neutral, expert sources of information and guidance that potential SMART participants can trust. Much of the educational goals of the Disclosure Forms could be better served by providing potential participants better educational material that they can access and review not only

² See MassCEC's ["Massachusetts Residential Guide to Solar Electricity"](#)

right before they sign a SMART participation agreement, but also well in advance of their selection of a contractor or service provider that best meets their needs. DOER (and MassCEC) could provide significant benefit to MA citizens by better supporting them earlier in the sales process with expert, trusted facts and guidance from a neutral provider. Most participants have never made a solar purchasing decision before; they are typically overwhelmed and confused by the technology; they are typically overwhelmed and confused by the incentive program; and they are typically overwhelmed and confused by the utility agreements and tariffs. MA DOER and MassCEC could make it easier for them by better educating them well before the moment of the sale.

Better pre-sale education and support will also lower the perceived risk of going solar, lowering the risk premium (i.e., demand for a higher return on investment) perceived in a solar purchasing decision, and, thereby, lowering the cost of any required solar incentive program to all ratepayers and citizens in Massachusetts.

DOER implicitly intends to prompt some questions in the Disclosure Form to ensure that certain topics have been discussed prior to the signing of the contract, including some key issues, terms and responsibilities that have frequently arisen in disputes after the sale. Other topics that are important to a well-informed solar decision and post-sale satisfaction are not being addressed in the Disclosure Form, perhaps due to a consideration for brevity.

Avid Solar believes that the forms could be shortened considerably by “off-loading” much of the specified “discussion items” to an updated Consumer’s PV System Buying Guide, as well as a Consumer Guide to SMART. Informing potential SMART participants about questions they should be having when they are evaluating their solar options and potential solution providers, well before the time of the contract signing, and providing them with important education material from a trusted source would do much more to advance consumer protections, lower the perceived risk of solar, and lower the overhead associated with serving the ≤ 25 kW market segment.

Included in the Buyer’s Guide should be information regarding:

- The Massachusetts Home Improvement Contractor Law and/or a reference and contact information to the Office of Consumer Affairs and Business Regulations, noting that the HIC laws and regulations do not apply to small commercial customers in the ≤ 25 kW market segment.
- The expected life of a PV system and the complications associated with taking the system down and then re-installing it if a roof covering needs to be replaced;
- Power performance warranties from PV module manufacturers and what they mean; questions to ask about warranties from manufacturers and service providers, recommending that copies of manufacturer warranties for major system components be provided for host-owned systems, along with explicit language regarding workmanship warranties for installation services;
- Questions to ask about “dealer fees”, closing costs, pre-payment penalties, re-amortization allowances and fees, same-as-cash terms, and other fees and financial matters that might affect

the total payments for a PV system, the timing of those payments and how they affect one's return on investment;

- Information regarding (links to) the Federal and State PV incentive programs available to PV system owners;
- The Disclosure Form should include a checkbox to indicate that the participant has received a copy of the guide and was allowed time to review it.

Included in the SMART Program Consumer Guide should be key features of the program, including but not limited to:

- The term of the program & how the incentive payment is calculated;
- How payments will be made, including the lag between production and payment, and how the energy credits and incentives will be paid;
- Clarification from MA DOR regarding whether the incentive payments should be treated as taxable income;
- Information regarding the claims & rights regarding clean energy attributes;
- Clarification on the rules regarding attached storage systems, including the required cycle times and storage sizing; please provide examples;
- What happens at the end of their SMART program participation and whether/how systems can become eligible for the Class I REC program participation.
- The Disclosure Form should include a checkbox to indicate that the participant received a copy of the guide and was allowed time to review it.

Providing comprehensive, **consistent, accurate**, easily understood guides to potential SMART participants regarding solar purchasing best practices, questions to ask of Community Solar developers, and how the SMART program works would be of great value to SMART participants. Having a checkbox on the Disclosure Form to ensure that participants were aware of the guides and had a chance to review them is better than the proposed approach of using certain checkboxes on the draft Disclosure Form.

- **Certain data requested should be eliminated from the Disclosure Form, while other fields require clarification/definition.** To the extent that the regulation does not explicitly define information that must be represented in the Disclosure Form, Avid Solar recommends that DOER refrain as much as possible from collecting additional consumer information that is not used and useful in its role as the program administrator. Avid Solar notes that the regulation actually says that the Disclosure Form "will

be developed by the Department **to provide consumer information...** [emphasis added] The wording of the regulation implies that this is an information collection effort by DOER **about** the consumer, not a consumer education/protection process where information is being provided **to the consumer**, perhaps in an effort to ensure that the consumer understands the key terms of the agreement, the SMART program and any ensuing responsibilities associated with the performance of the PV system. Curiously, DOER seems to have adopted the latter interpretation of the regulation, despite what the regulation actually says. Avid Solar, when the regulation was passed, assumed that the required consumer signature on the form is meant to ensure that the form reflects the consumer's understanding of what is in the consumer's agreement with the contractor or service provider.

Additionally, 225 CMR 20.06 (1) (b) notes that the Disclosure Form will be **"signed by the Owner as part of its Statement of Qualification Application."** [emphasis added]. The regulation anticipates that this information will be part of the SQA process, not a pre-cursory, separate form that is intended to be provided to the consumer before the consumer signs an agreement with a contractor or service provider. As noted previously, Avid Solar encourages DOER to not cause additional overhead burdens, especially given how regressive they are for small system owners. If DOER seeks to ensure that customers are making better-informed contracting decisions, then Avid Solar encourages the development of better pre-sales guides. Avid Solar would applaud DOER and MassCEC for undertaking such efforts to provide a **consistent, accurate, trusted**, source of information. Avid Solar would gladly help DOER and MassCEC in the development of those guides.

Regarding specific data requested on the Disclosure form for Direct Ownership, Avid Solar specifically recommends:

- Change the "Warranty/Maintenance Contact Information" to "Primary Service Contact". There are many different warranty contacts—one for each system component. What I believe you seek is the person to call if the consumer believes something is not operating properly. Even for manufacturers who warrant their products, generally the installation contractor is supposed to be the first point of contact.
- For the "Contract, Cost and Estimated Performance Information":
 - Remove questions regarding warranties;
 - Instead of asking whether a shading analysis has been done, request the shading loss percentage, which will most likely be required in the SQA;
 - Remove "Cost of Contract Cancellation", which is probably a vestige from a CSS or TPO form;
 - Remove "Contract Effective Date" (again, probably a vestige from a CSS or TPO form)
 - Ask only one question regarding the system cost: **What is the cash price** for the system, net of any upfront discounts or rebates offered by the installer, but not including any closing costs, dealer fees or other financing charges, whether due at closing or financed? I would make the question simple and add a footnote regarding how the cash price is defined. Note, this is **not** the "Same as Cash" price that many installers might offer through a third-party financing company that offers no interest and/or no payments for a number of months before financing charges

apply. Such “Same as Cash” offers involve a dealer fee that is paid by the contractor directly to the financing company, and the price to the customer reflects this fee.

- Include additional technical questions in this section required to complete the SQA.
- Eliminate the “Financing Information” section. While Avid Solar sincerely appreciates DOER’s efforts to make explicit certain financing costs that are often hidden in third-party financing arrangements, this can be a bit like playing whack-a-mole. Financing entities will simply change the name “dealer fee” to something else, for example. Most of the financing companies do not consider the dealer fee as a hidden finance fee, or as a finance fee at all, even though they use the fee to offer lower interest rates on an inflated principal amount. A better solution is to very strictly define the Cash Price option noted above on the system cost section.
- Eliminate the “Other Information” section. The first question is an odd, backhanded, likely ineffective attempt at enforcing the MA OCABR HIC laws. If DOER observes contracts that do not clearly reflect the requirements of the HIC laws—which are for *residential* customers only—then they should inform/warn the installer, requesting that they amend the contract or risk being reported to the OCABR. Instead, in the Consumer Buyer’s Guide, the HIC contract requirements and benefits should be noted and emphasized.

The question regarding project performance appears to be a vestige of a TPO or CSS disclosure form and does not make sense for Direct Ownership.

The Roofing questions pose a real liability to the contractor regarding something that is not typically specified in a Direct Ownership contract. Contractors and the consumer may not know nor have any evidence of when the roof was installed or when it will likely need replacing, even if the contractor does typically advise on the condition of the roof covering, and will likely advise replacing it if the contractor believes the roofing reveals a likely need to be replaced in 0-10 years. Committing to a specific date and the cost at that time of removing and re-installing the rooftop system, however, would be a guesstimate, at best, potentially decades into the future. Given how the question is being asked by DOER, it appears to be an offer for a specific price at some unknown date. Avid Solar strongly recommends removing these roofing questions entirely. Instead, they should be included in the updated Consumer’s PV Buying Guide as an important discussion item and evaluation criterion.

- Although the Responsibilities Checklist section and the Ownership of Incentives section are required, to a certain extent, by the regulation as part of the Disclosure Form, they are not required in this format. They could just as easily be covered by a couple of statements:

“System Owners” are primarily responsible for the operation and maintenance of their PV systems after the installation agreement terms have been fulfilled.

The Distribution Utility claims ownership of the associated RECs during the System Owners participation in SMART.

The SMART tariff incentive compensation is \$0.xx/kWh.

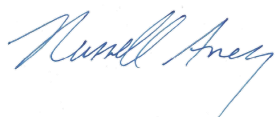
Avid Solar believes that all of the Ownership of Incentives questions are useless for Direct Owners. Everything except for the Utilities' rights to the RECs belongs to the System Owner. If the Owner intends to subsequently assign or offer a security interest in any of those benefits to help finance the system purchase, that is a different question and does not really belong on this form.

In summary, Avid Solar seeks to improve consumer protection through the development of better, more comprehensive guides regarding the buying of a PV system or services, and the SMART program, published by MassCEC and DOER, respectively. These freely available guides, made available to consumers early in their buying process will do a much better job educating consumers about solar, contracting laws and the solar incentive and tariff programs. Rather than using this disclosure form, near the end of their buying process, to ensure certain information has been shared with consumers, let's be pro-active and more comprehensive in educating the citizens of Massachusetts about their solar options.

The Disclosure Form, instead, should hew more closely to the actual regulation, collecting certain information for DOER to better perform its duties as program administrator. Additionally, where possible, DOER should strive to make the SQA and Disclosure Form process as cost-effective and efficient as possible, using a digital document and signature approach that captures all of the required information at once, eliminating redundant data entry—and its associated errors—while also lowering the regressive soft costs associated with participating in the states solar programs.

Thank you for considering our feedback on the proposed disclosure forms and process.

Sincerely,



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