Kyle Wallace
Manager, Public Policy
Email: kyle.wallace@vivintsolar.com

Vivint Solar appreciates the opportunity to submit comments on the proposals included in the 400 MW Review presented by DOER. In addition to the comments here, Vivint Solar endorses the joint comments filed by SEIA, Vote Solar, SEBANE, MassSolar, NECEC, and others.

Massachusetts was one of the first markets in which Vivint Solar operated, beginning in 2012. Over the last 7 years Vivint Solar has served nearly 20,000 residential customers, totaling over 130 MW of installed solar capacity. Vivint Solar offers consumers both third-party and customer-ownership financial products. Vivint Solar provides a full-service experience to customers from sale to design to installation and maintenance for 20 years. With over 400 employees across the state including installers, electricians, sales representatives, surveyors, and warehouse staff, Vivint Solar is committed to Massachusetts.

Metering Changes for Energy Storage Paired Systems

Requiring the EDCs to accept revenue-grade meter readings from inverters for AC-coupled energy storage systems is a good change that should be implemented. However, we believe that this should also be an option for DC-coupled energy storage systems. The existing restrictions and requirements for DC-coupled energy storage systems have frozen the market and need to be addressed to spur widespread adoption of energy storage and participation in utility-run demand response programs. These systems should be able to fully participate in SMART.

Currently, the primary issue with participation in the SMART program by DC-coupled energy storage systems is in use cases with a back-up panel where there are two AC lines coming from the inverter, one to the main service panel and one to a back-up panel powered by the PV and energy storage system in times of grid outage. The current metering requirements only measure the AC production from the line going to the main service panel, thus measuring only a portion of the total PV production.[1] It is important to note that the utility-owned production meter cannot differentiate whether the energy passing through it came directly from the PV system or from the energy storage system given that both are on the DC side of the inverter. This metering set-up is currently approved for use, and as such it does not appear there is a specific reason that differentiating energy source between the PV system and the energy storage system is necessary.

In Docket 17-140, National Grid and Unitil filed for approval of a metering solution for this unique problem which includes having utility-owned production meters on both AC lines coming out of the inverter which are then summed together for the SMART payment values.[2] Once again, it would not be possible to distinguish whether the energy passing through both meters came directly from the PV system or the energy storage system.

The stated reason at the Lenox stakeholder meeting for not allowing DC-coupled systems to also use revenue-grade meter readings from the inverter for SMART payments was the inability to distinguish whether the energy being recorded by the inverter meter was coming from the PV system or energy storage system. We would point out that this is currently the case under the accepted configurations and would remain the case with the proposed solution from National Grid and Unitil (and supported by Eversource) if approved by the BPU. If there is a separate reason that inverter readings cannot be used for DC-coupled systems, any such reasons should be explicitly stated so a solution can be found.

---

[1] Based on the current metering diagrams available at www.masmartsolar.com.
[2] https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/11145677

Allowing inverter-based reporting for DC coupled systems would level the playing field between energy storage use cases and would allow for full participation in the SMART program. The potential solution filed by National Grid and Unitil provides on avenue for participation, though it requires additional equipment, costs, and utility billing system upgrades (or manual billing), where allowing for inverter readings would provide a cheaper, more accessible option for customers and developers.

Consumer Protection Measures

Summary

Vivint Solar supports the proposed consumer protection standards included in the proposal and believes that they will better inform participants of the materials terms of their contracts and ensure that low-income customers are receiving savings. Vivint Solar has actively participated in the development of consumer protection measures across the nation including in California, Illinois, Utah, New Mexico, New York, and Nevada. The comments below draw on those experiences of what types of measures have worked and what the best processes have been in developing consumer protections. The following comments will address the implementation and compliance of the proposals.

There are two key components of these proposals that need to be addressed: specificity of the requirements and adequate lead time for the industry to ensure compliance. The information provided in the presentation is currently not adequate for the industry to ensure compliance if these proposals are filed in November and go into effect immediately.

One specific example of where more information is needed is regarding the calculation and determination of savings for low-income customers. In order for companies to ensure they are complying with the new rules they need to understand what utility rates DOER will be using (current, 1-year average, 3-year average, etc.), what the threshold for savings needs to be, and how that applies to alternate financial arrangements such as a no-escalator PPA or lease. All of these areas are undefined in the proposal and as such are difficult to comment on. There are additional questions about whether disclosure forms with simple mistakes in information are treated the same as disclosure forms with incorrect answers to the questions regarding contract terms and whether a warning remains on a company's record indefinitely or if after so long it drops off. There are enough nuances that must be addressed by the final consumer protection rules to warrant a more iterative approach so that the industry can provide feedback and understand exactly how to comply with any new requirements.

A lead time of up to several months may be necessary to adjust to the final requirements, depending on the complexity and substance of the new rules. The reason for a lead time is that companies will need to potentially adjust, strengthen, or create new processes and checks to ensure compliance, given the substantial punishment in the event of non-compliance. This could include trainings for a variety of company groups, changes to information technology systems, changes to contracts or pricing, and other substantial business changes. These adjustments are not currently possible given the information provided. The new rules should also only apply to new contracts and disclosure forms signed after the rules go into effect. They should not be related to the SMART submission date which is later in the process and would make it nearly impossible for companies to ensure complete compliance. Further stakeholder review and comments on the specific new requirements would be helpful before such rules are made final.

Consumer protection is a living issue that requires updates that may fall outside of the periodic 400 MW review process. A transparent, iterative process with key stakeholders including DOER, the Attorney General's Office, the solar industry, and consumer advocacy groups would be able to address issues as they arise. Such a group could help develop the existing proposals so that they can be implemented in a timely manner and in a way that can ensure that the stated customer protection goals are achieved.

Clear Compliance Date

Under the current timeline in the presentation, DOER will review the comments filed and then work on drafting the emergency regulations with the appropriate entities which will then be filed in late November. At that point the emergency regulations would go into effect immediately. In this proposed process there is no additional review for the specifics on these consumer protection measures, nor would the requirements for compliance be known until the regulations are filed (at which point it would be too late). This uncertainty will be extremely difficult for the industry.

We propose that there are two paths that could potentially be taken to address this issue (fully acknowledging our limited understanding intricacies of emergency regulations and what they can or can't do). The first option is that the final specifics of the consumer protection proposals are released well in advance of the filing of the emergency regulations with a specific date in the future that the proposals will go into effect. This would provide certainty outside of the specific date the emergency regulations are filed. If the specifics of the proposals are not known until the date the emergency regulations are filed, then we would propose that in the emergency regulations themselves a future date is specified for compliance with the new measures so that the industry can adjust accordingly.

Second, the emergency regulations could include general measures regarding a consumer protection working group whose policies would take effect as developed. This would allow the working group to set compliance deadlines that are reasonable once policies are fully developed.

Disclosure Form Answers & 3 Strikes Policy

We support the increased scrutiny to ensure that the answers on the disclosure form match the actual contractual terms. It would be helpful for DOER to provide an "example" form to show what appropriate and inappropriate answers could entail. There is an inherent difficulty in translating potentially long contractual terms into a concise, easy to read disclosure form answers. Some companies may prefer to have the disclosure form reference the specific sections of the contract that address the question in the disclosure form so that there is no confusion between the form and the contract. It is not clear whether this approach would be acceptable under the new standards. We believe that companies should be able to have DOER review their disclosure form answers to ensure compliance rather than waiting for DOER to issue a warning before correcting an issue. This proactive screening will be helpful for companies seeking to fully comply, reduce the number of warnings that DOER may issue from their audits, and ensure that as many customers as possible are getting accurate information on the disclosure forms.

We believe that warnings, given the severity of the punishment, should only be issued if the contractual terms of the agreement are stated in deceptive ways on the disclosure form and not for any minor mistakes that may occur on the disclosure form such as an incorrect system size (some customers have had multiple designs and prepped disclosure forms with a company which could lead to incorrect submissions) or typos on the customer's address or other benign information. These are non-malicious mistakes that may occur in general document preparation and shouldn't be treated equivalently to deceiving customers on material contract terms. The current process of rejecting the disclosure form in the SMART application portal until corrected appears to be an appropriate response to these cases.

Regarding the "3 strikes and you're out" policy, this should be set over a specific amount of time where prior warnings drop off after a specified period of time, which could potentially vary based on the severity of the offense. Repeated non-compliance over a shorter duration shows a disregard for the rules that would warrant suspension. Given the frequency with contracts can change (or new product offerings) and the sheer number of customers signing disclosure forms it is plausible that well-intentioned companies could end up with 3 total warnings over a several year period which would lead to their suspension for 1 year. It is conceivable, or even probable, that many companies would end up being suspended eventually if the warnings never drop off their record. We do not believe this is DOER's intention and would harm the residential solar industry.

For companies like Vivint Solar that submit a high number of SMART applications on a daily basis, we would like further clarity on how these are treated if a warning is issued. It is entirely possible that a warning could be issued in the morning, but is not seen or responded to by the appropriate company personnel until later that day (including stopping any further SMART submissions until the corrections have been made). In the mean-time document processors could be submitting new applications to the SMART program without knowing that a warning has been issued during that several hour period of time. Would those submissions done on the day the warning is issued be considered the second and third strikes and lead to suspension? We believe that there should be a grace period allowed given that communication between all necessary teams is not instantaneous.

One piece of that proposal that needs to be clarified is whether the savings check is occurring for all customers or just low-income customers. The presentation specifies that warnings are issued to developers for low income customers where savings is not demonstrated, but in the review of the disclosure form for non-low-income participants it notes that the current utility rate is compared to the contract rate. Further clarity on this issue would be appreciated.

Low-Income Savings Policy

It is a very reasonable consumer protection measure to ensure that low-income customers participating in SMART are saving money, especially given the higher SMART incentive rate meant to allow for lower-priced PPAs or leases. We are supportive of this requirement.

Given the variety of methodologies for calculating a "current utility rate," we believe that DOER should publish on the SMART website the specific rates that they are comparing the contracts to when determining savings. Given the strict punishments for non-compliance, the pathway to compliance must be clear for companies to follow. This includes issues such as whether the customer has a third-party electric supplier, if the product they have chosen is a no-escalator PPA/lease that has a different savings expectation than a traditional PPA/lease, how frequently the utility rates are updated, and the minimum level of necessary savings required.

Additionally, if the "current utility rates" fluctuate somewhat frequently depending on the methodology, it is possible that when a customer signed an agreement that the PPA/lease rate did provide savings but by the time it was submitted for SMART the savings profile could be different. We believe that the savings comparison should be based on what the published utility rate was at the time the contract was signed and not necessarily when the SMART application was submitted. Developers should not be punished for future changes to utility rates that are outside of their control.

Questions on the Proposals

The sections above are primarily focused on clarifying aspects of the proposals. We believe that there are enough complications and circumstances that need to be considered that an iterative, stakeholder process where DOER and the industry can collaborate on implementing these proposals would be beneficial for everyone involved. The following are a non-comprehensive list of questions regarding the proposals that we believe would need to be clarified or answered prior to the consumer protection measures going into effect. We have provided suggested answers that we believe would work, but would prefer a discussion on these questions so that the final rules work for customers, the industry, and regulators.

1. *How are no escalator leases or PPAs considered for low-income customer savings where they may not provide immediate savings but are intended to offer greater long-term savings? Are there any savings*

requirements for system purchases?
For a no escalator lease there could be a maximum threshold above a customer's current utility rate to reasonably ensure long-term savings (for example 5% or 10% higher than the utility rate in year 1). For system purchases (which are probably rare with R-2 customers but do exist) no specific savings should be required given that it would essentially require companies set their pricing at specific points set by DOER. Additionally, those customers are typically receiving the higher SMART incentive value which should help provide savings.

2. *What items on a disclosure form would lead to the form being rejected at Reservation Request versus what times would lead to a warning from DOER?*
We believe that the current review of disclosure forms and rejections on SMART applications should continue for general disclosure form information. Warnings should only be issued if there are deceptive answers on contractual terms or other clear deficiencies.

3. *Is demonstrated savings required for all customers or just low-income customers?*
We believe that it should be required and checked for low-income customers first given their vulnerability, and depending on the administrative and industry experience with that requirement there could be additional consumer protection rules developed for all customers.

4. *How specifically is savings calculated? What is the definition of "current utility rate?"*
We believe that the current tariffs for the utilities with a 1-year average of the supply cost would be appropriate. This could be updated once a year with the value of the new annual rate known ahead of the change so companies can adjust pricing if necessary.

5. *How frequently will the "current utility rate" be updated?*
We believe it should be updated no more than annually. Too many changes throughout the year would create confusion and be difficult administratively.

6. *Are there any consideration for R-2 customers taking service through a third-party supplier?*
We believe that the rules should assume the customers utility rates based on their EDC and not with any supplier considerations. Given the number of suppliers and pricing plans, it would not be feasible to consider such complexity. This is consistent with how Illinois treats its savings disclosure on its disclosure form.

7. *If at the time the customer signs the solar contract it was expected to produce savings, but at the time of SMART application conditions have changed, will that be found to be in violation of the policy?*
The utility rate to contract rate comparison should be done with the applicable rates at the time when the contract was signed.

8. *Is there a minimum threshold of savings that must be demonstrated for low-income customers (e.g. 5% or 10%)?*
We believe a minimum threshold of 5% or 10% savings would be appropriate.

9. *Are the new standards only applicable to contracts/disclosure forms signed after the compliance date?*
It is a necessity that when the new rules are put into effect that they only apply to contracts signed after that date. Companies cannot be held responsible for not complying with rules that did not exist when a

contract was signed.

10. *If a developer is suspended for 1 year, does that mean all existing customers in the SMART process are unable to get SMART payments? Or does it just prevent new applications for SMART?*
    If a developer is suspended it should only be for new applications. It would be unfair to existing customers with an installer to be punished because their installer cannot complete their SMART application. There would remain an issue with customers who may have already signed a contract and potentially been installed or outside their right of recession period, but whose contractor gets suspended and had not yet submitted that customer's SMART application. Those customers could potentially not be able to change solar companies but would be unable to participate in SMART. Suspension from the SMART program is a difficult issue to ensure customers are not harmed, and the protocols around it would need to be very well defined.

11. *Will DOER review disclosure form answers upon request from a company to ensure compliance?*
    DOER should have a process to proactively review disclosure forms for companies. This would ensure compliance and would help ensure customers are getting accurate information without the necessity of waiting for a warning to be issued.

12. *Will SMART applications and disclosure forms submitted the day that a warning is issued be considered second and third strikes against the company?*
    There should be flexibility around what is considered a strike. Normal business operations do not change on an instantaneous basis. Additionally it is possible that many customers could have already signed a disclosure form that DOER determines has a deficient answer. Would all of those customers need to re-sign disclosure forms or would it be on an ongoing basis? Clear information around these scenarios is needed.

13. *Will warnings every drop off or are they permanent until a company is suspended?*
    Warnings must drop off at some point, which should be based on the severity of the issue. Submitting a low-income customer who is not savings despite the clear rules from DOER being available should remain for a year. A minor discrepancy with a disclosure form answer that should be corrected but isn't malicious should be a smaller amount of time such as 3 or 6 months. We caution having such a rigid strikes policy.

14. *Is there any appeals/defense process if a company believes they were given a warning for a contract term that they do not consider to be misleading?*
    If a warning is issued, companies should be able to have a chance to have conversations with DOER on the matter and potentially have the warning overturned.

15. *If a deficient contract term is identified, will all prior disclosure forms signed by customers need to be changed with new customer signatures?*
    This should be handled depending on the issue identified and communicated with the warning. If it is a minor wording change on an answer to better align the disclosure form and contract without material differences, then perhaps it could be applied for new disclosure forms only. If it is a major, deceptive answer then it would make sense for all disclosure forms be re-signed. For larger companies with hundreds of customers in the process at any given time, requiring customers to re-sign a disclosure form due to a minor change is a major undertaking with costs and customer satisfaction risks involved. Most

customers would probably not understand why they have to resign virtually the same document and may be hesitant to do so.

Conclusion

We appreciate the opportunity to comment on the 400 MW Review Proposals and look forward to continuing to participate in the stakeholder process where possible. We strongly recommend considering a consumer protection working group that can develop protections, for the current proposals and future protections, through a transparent, iterative process.

Kyle Wallace
Manager, Public Policy
kyle.wallace@vivintsolar.com