

December 10, 2018

Illinois Power Authority 160 North LaSalle Street Chicago, Illinois 60601

InClime, Inc. 326 First Street, Suite 27 Annapolis, MD 21403

Re: Vivint Solar Comments on Illinois Adjustable Block Program Guidebook

Dear Illinois Power Authority and InClime, Inc.

Thank you for the opportunity for Vivint Solar, Inc. "Vivint Solar") to provide written comments on the Illinois Adjustable Block Program's Guidebook. Vivint Solar commends the Illinois Power Authority ("IPA"), the Illinois Commerce Commission ("ICC"), and the Program Administrator, InClime, Inc. ("InClime"), for their thoughtfulness in the development of the Adjustable Block Program ("ABP"). We applaud the desire to spur solar development within the state of Illinois while also developing meaningful measures, requirements, and application processes to protect consumers.

Vivint Solar is a national leader in the residential solar market. Through Q3 2018, Vivint Solar has over 140,000 customers nationwide, and has installed over 1 GW of rooftop solar across 22 states. Vivint Solar employs approximately 3,500 people across the nation, including sales persons, installation technicians, electricians, warehouse employees, and administrative positions. We are actively involved with various trade organizations, including the Solar Energy Industries Association ("SEIA") and many of its state affiliates, and participate with other organizations seeking to understand the solar industry and protect consumers, including the Clean Energy States Alliance.

Vivint Solar offers both third-party and direct ownership financing models to provide customers with the option that best meets their energy needs. We announced plans to expand into Illinois on August 2, 2018, and look forward to bringing the benefits of clean affordable energy, along with the creation of jobs, to Illinois residents through participation in the ABP as an Approved Vendor.

Vivint Solar appreciates the efforts of the IPA and InClime to gather stakeholder feedback, both during the Stakeholder Meeting held on October 10, 2018 (representatives of Vivint Solar's legal/compliance, new markets, and policy departments attended the meeting) and through written comments. Vivint Solar's comments herein are not intended to be a line-by-line review of the Approved Vendor Application and Standards, but will address select critical issues for IPA's and InClime's consideration.

Comments

Site Map (Page 14)

Residential rooftop solar site plans should not require the property boundaries be marked on the site



plan as it does not actually impact the system on the roof of the home and provides unnecessary, unactionable information. To our knowledge, including property lines on site plans is rare across the country and would add an avoidable level of complexity with no discernable benefit with regards to the program. Site plan requirements should be driven by the authority-having-jurisdiction (outside of the pieces that are clearly relevant to the ABP such as equipment, system layout, and electrical design), and the ABP should not adopt standards that are more complex than those standards required to actually permit systems. Property lines should only be required for ground-mount systems where property setbacks or other requirements may be applicable and relevant. Additionally, leniency should be allowed for the site plans of systems that were already contracted, designed, installed, and/or energized prior to these requirements so that new documents are not required with no other purpose than to comply with these submission requirements.

REC Quantity Calculation (Page 15)

Vivint Solar would request that this section be significantly revised as it poses very real practical issues that could make it unworkable for the industry. First, most systems won't qualify for the standard capacity factor under the Minimal Shading Criteria, and thus be required to use an alternative capacity factor. If vendors were to use the standard capacity factors they would likely end up in a situation where they are chronically under-delivering RECs based on their obligation; an outcome that all vendors will want to avoid. Due to this, we believe that most projects will need to use an alternative capacity factor so that it can more accurately represent the actual estimated production of the system and thus contract for the correct number of RECs. For that reason, the alternative capacity factor should be treated as the default option.

The second issue is that many software tools used in the industry for the design and production output of a system do not simply allow for the input of a number of variables to provide the system's production like a PVWatts tool; they are more sophisticated than that and would require InClime to essentially re-design the whole system in the software to replicate the production figure which would require an in-depth training of the software used by each company. Even if InClime were to then design the system exactly the same in the proprietary software, it wouldn't necessarily allow InClime to see the calculations running the background to generate the production estimate, so the verification wouldn't actually seem very beneficial. This seems like an unnecessary and cumbersome requirement if it is being used on the vast majority of applications for the ABP. These proprietary tools are far more accurate than a generic PV Watts estimate of production, and the unintended consequence of the current structure of this section could end up actually punishing more sophisticated methods of estimating production at the expense of customers and developers. The key driver of the production figure in design software is the shading methodology used. If the shading methodology used (Google Sunroof, Solmetric Suneyes, Solar Pathfinder, etc) is allowed by the program, the production estimate derived from those sources should also be allowed.

There is also a practical issue with this approach as well, because production estimates will appear on multiple documents that the customer may see before the REC estimate is approved by InClime. On the initial design proposal, a company would show the system's estimated production based on their own proprietary methods. Then this production amount would be entered into the disclosure form in the portal, and potentially onto the customer's contract as well (particularly in a lease structure). It would only be after these documents are all completed and signed by the customer that the approved vendor would be entering the REC estimate amount and going through that verification process. If InClime cannot replicate the exact production estimate would that require all new contracts and



disclosure forms? If so, requiring all new documents for a customer would likely end up driving potential customers away from installing solar energy systems due to a frustrating process. Essentially, developers must have a reasonable confidence that the production estimate they are showing the customer upon initial design will be accepted by the ABP. Any other outcome is unacceptable and will be extremely difficult for the industry to implement.

Vivint Solar would recommend that companies be able to explain their shading/production methodology to InClime and/or the IPA and receive approval to use that methodology. The ABP could approach this like many other programs have done across the nation and provide a list of approved shading softwares/tools and just require the company input what shading source was used to ensure it complies with the program. Then if a vendor wanted to use an alternative methodology or tool beyond what is generally approved, that would require additional scrutiny from the ABP. Many companies will be using the same shading tools or software, thus approving those would reduce the number of company-specific programs or templates InClime would need to manage.

Given the 15-year delivery requirement, annual reporting, and stringent requirements to become an approved vendor, the approved vendor has every incentive to ensure that they are correctly estimating the system production and associated REC estimate. Given those facts, the IPA and InClime should be more trusting of the information provided by the approved vendor rather than starting from a position that the approved vendor's estimate is incorrect.

Part II Submittal Process - System Size Change (Page 21)

The guidebook should clarify whether the +/- 5% change is referring to the inverter or panel nameplate capacity (or both). In the example given where a system gets pushed to the over 10 kW category, that would be a change in the AC system size. DC system size changes are more likely to occur due to a panel being dropped from the design due to an unexpected issue during installation or a slight change in the wattage of the panels from design to install (going from 305W panels to 310W for example).

Payments (Pages 21-22)

Please further explain the payment section in more detail. Upon a system receiving Part II approval InClime will provide a confirmation sheet to the approved vendor. Does the approved vendor then need to reach out to the utility directly to receive payment for that project, and if so, what does that look like? Or will companies be able to enter their account information in the portal and have the payments deposited directly after a project is approved and the utility has been notified?

Part I Requirements (Pages 23-24)

Meter – For inverters with built-in ANSI C.12 compliant revenue-grade meters, is the inverter specification sheet acceptable? Please clarify this in the final guidebook.

Proof that Brochure Delivery – Please provide examples of what proof is deemed acceptable. Is a copy of an email with the brochure attached acceptable? Is a customer signature required acknowledging delivery of the brochure? This is a key item that needs to be clearly understood by the industry so that it can comply by documenting the delivery properly as soon as the brochure is available.

Sincerely,



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