

May 17, 2017

Anthony Star  
Director  
Michael A. Bilandic Building, Suite C-504  
160 North LaSalle Street  
Chicago, Illinois 60601

**RE: Request for Comments for Initial Forward Procurements**

Sol Systems appreciates the opportunity to provide input and responses to Director Star's questions dated May 11<sup>th</sup> discussing annual REC procurement from new utility-scale solar pursuant to Public Act 99-0906. To date, Sol Systems has financed and/or delivered over 500 megawatts of solar energy across the country in the commercial and small utility-scale market segments. Since 2008, Sol Systems has been an active participant in 13 solar renewable energy credit (SREC) markets, including Illinois, in its role as an aggregator for residential and small commercial solar customers. Sol Systems is also active in the Environmental Markets Association and serves as Chair of the REC Principles Committee.

Sol Systems would like to offer the following response related to site control and REC flexibility that we believe will set up the Illinois solar market to succeed at a low cost to ratepayers.

Sincerely,

A handwritten signature in black ink, appearing to read "Sara Rafalson".

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## **Topic 1: Site Control**

### **Question 1: what would be an appropriate site control standard?**

It is critical that the Illinois Power Agency (IPA) develop a site control standard that requires developers to have reached a sufficiently advanced stage in the development process. Establishing this standard will provide the IPA with insight whether a project is likely to be viable. During the workshop on May 11, IPA suggested that either:

- A. A signed interconnection agreement be required, or;
- B. It must be clear that a developer understands that they will ultimately need an interconnection agreement.

Sol Systems finds that the first requirement (A) is too strict, whereas the second requirement (B) does not provide a significant barrier to prevent unviable projects from displacing viable projects in the procurements, thereby making it more challenging for the IPA to fulfill the intent of its statutory obligations in a timely manner. In the case of utility-scale solar projects, a signed interconnection agreement may take 2-3 years of study.

Given the nascent stage of the market, and the near-term need to issue procurements to meet the ambitious statutory requirements in the Future Energy Jobs Act, we recommend that the IPA consider two alternative options for site control, or both.

- Option 1.) A site lease option
- Option 2.) Interconnection application or pre-application study.

Sol Systems believes that together, these site control standards will be sufficient to avoid speculative bidding while helping IPA meet its procurement targets.

Question 2: Would having the option of providing an additional performance guarantee in lieu of providing evidence of site control mitigate the risk of failure to develop the project in time to start REC deliveries?

Performance guarantees in the form of a bid deposit are critical for ensuring that only the most viable projects are put forth for bid. The site control standards that we site above will also mitigate this risk.

## **Topic 2: REC Delivery Flexibility**

Question 1. What circumstances (e.g., operational or performance risks) could lead to a project failing to deliver its annual delivery quantity and could be mitigated through allowing banking and/or replacement RECs?

Shortfalls in REC delivery may occur for a number of reasons, many of which may be outside of a developer's control, such as a year or several consecutive years of low solar resource. Operational performance (i.e. an inverter malfunctions) could be another risk. The IPA should also expect that new market participants – or local and regional developers scaling to utility-scale projects for the first time –



may inaccurately predict their fixed REC quantities. As a result, flexibility should be considered in REC delivery.

While flexibility is key, Sol Systems does not recommend that developers procure replacement RECs in case of shortfall. While in theory this could be a method to address a developer's REC shortfall, the implementation of a replacement REC system is writ with complexity. The statute requires IPA to conduct centralized REC procurements; this is not a tradable REC market as we have seen in New Jersey, Massachusetts, and other markets.

Additionally, it is impractical for a developer to set aside cash in case of a REC shortfall and then purchase an unknown quantity of RECs at an unknown value. This will increase the cost of capital for such projects and therefore increase the cost of contracts unnecessarily under IPA procurements. Many utility-scale project structures would likely not have this TBD cash in reserve, and would likely put in a higher price for lower volume to address the risk. An open-ended liability such as procuring RECs in a shortfall on the market is an unfinanceable project structure in most circumstances.

Question 2. Should the ability to bank RECs be unlimited or should there be parameters (e.g., quantity, vintage)?

While Sol Systems recognizes the IPA's focus on meeting its statutory requirement, we encourage the IPA to understand that realistically, it will be challenging to procure precisely 1,000,000 RECs (that are actually physically delivered each year); there will be some projects that produce in excess, and some that may have a shortfall. Given unknown pricing of RECs from one project to another, trading to allow developers with a shortfall to buy excess RECs from another developer will be costly, create uncertainty for a developer, and drive up the cost of capital, discouraging growth in the market and leading to higher ratepayer costs.

Sol Systems recommends that the IPA focus on site control and financial measures to ensure that viable projects are bidding rather than focusing on how to penalize developers in case of a shortfall once a project is already operational (because if a project underperforms, they are already penalized by less revenue and cash flow since they delivered less RECs than they were expecting – this in fact, creates the incentive for developers to deliver the RECs they have contracted for).

Because of the complexities in implementation that we envision above, Sol Systems does not recommend a replacement RECs solution as a responsibility of the projects with contracts. Instead, in case of a shortfall, we recommend that the IPA assume the obligation to purchase the shortfall of RECs versus the annual REC target via replacement low cost RECs on the open market by first giving RPS eligible systems without contracts and located in Illinois a right to bid into IPA spot REC procurements to fulfill the shortfall.

Second, if sufficient quantity is unavailable from IL located systems, Sol Systems recommends that IPA allow spot procurements from either PJM or MISO territories. Given the immense availability of uncontracted wind RECs and the oversupply of solar RECs in the PJM region alone, Sol Systems believes that IPA will be able to cover the likely shortfall of REC deliveries in early program years to the extent that they occurred at a lower cost to Illinois ratepayers vs. the contracts that are likely to be signed under upcoming procurements. This will ensure that the environmental claims IL is making through their RPS and REC procurements are verifiable (i.e., procuring 1 REC in a contract is not the same as actually buying



1 REC from a project that generated clean energy and the benefits associated with it). Sol Systems strongly recommends that the IPA evaluate the availability of low cost RECs in case of shortfall in its long-term procurement plan, and whether RECs from these markets may satisfy the public interest criteria in the statute. This solution can also simultaneously address the REC delivery contracting challenges and enable a fixed quantities / unit contingent hybrid contracting solution.

To elaborate further, through our experience transacting in thirteen SREC markets across the country, we find it most common for contracts to use firm volume – similar to the fixed quantities that the IPA is suggesting – but with a unit contingent component. For example, a developer would commit to selling a firm volume of RECs based on P90, and then sell on a unit contingent basis for generation produced above P90. Typically, there are costs to cover damages on the firm volume (in this example, P90). There is no penalty for unit contingent volume, but pricing for the unit contingent portion is often a few percentage points below market. This method penalizes developers with lower pricing for the volume that is uncertain. This method may minimize the need for further complexity in case of a REC shortfall.

This method assures that projects with a contract will deliver all the RECs that they generate and will not be penalized for shortfalls beyond the lost revenue of the lost deliveries. It also simplifies the financing and project structuring process thereby lowering the cost of capital, which will ultimately create a more efficient renewable energy market in Illinois. We believe that this is possible given the geographic eligibility and public interest criteria in the law.

However, if the IPA does not agree with this approach, we recommend that a developer be allowed to indefinitely bank their excess RECs to be used in a future year when the system may underperform so as to reduce as much as possible financial risk from the three strikes rule that the IPA proposed.

Question 3. Should banking of RECs be allowed between multiple projects owned by an entity/affiliate with contracts under the Initial Forward Procurements?

If banking is allowed, banking should be unlimited for RECs not purchased by the IPA and be allowed to be carried forward for future deliveries in the event of a shortfall. These RECs should also be unencumbered and be eligible for sale in other jurisdictions if the IPA does not purchase them under the terms of the contract.

Question 4. Taking into account statutory project qualification requirements, should the ability to provide eligible replacement RECs be otherwise unlimited or should there be additional parameters (e.g., quantity, vintage, narrower eligibility of RECs)?

Sol Systems does not recommend replacement RECs at the project level and deems the concept as an unfinanceable risk for the reasons mentioned above. Mainly, it will be challenging to predict the cost of the replacement RECs, which will lead to challenges in modeling and project finance. **Sol Systems believes that creating a system for replacement RECs will require the creation of a tradeable market, which is not the intent of the law.**

Question 5. Under what circumstances should underperformance that cannot be remedied through banking and/or replacement lead to the termination of a contract? What alternative penalty provisions should be considered to address underperformance?



Instead of focusing on fixed quantities, we strongly recommend that the IPA consider contracts that blend both firm volume and unit contingent contracts and that the IPA assume the responsibility for procuring shortfalls via the spot market to maintain the integrity of the state's renewable energy standard.