



# Illinois Solar Energy Association

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October 14, 2014

Anthony Star, Director  
Illinois Power Agency  
160 North LaSalle Street, Suite C-504  
Chicago, IL 60601

Dear Director Star,

Thank you for the opportunity to provide comments on the proposed Draft Supplemental Photovoltaic Procurement Plan. In our previous comments, the ISEA recommended that the IPA develop a procurement program that is simple, transparent, predictable and equitable for various business models and market segments. It is with these goals and measures in mind that we request reconsideration for the distributed generation procurement process as outlined in the Draft Supplemental PV Procurement Plan. The solar industry, particularly the <25 kilowatt (kW) DG installers and installations have unique parameters and business models that are likely quite different than typical transactions within the purview of the Illinois Power Agency. As the Supplemental PV Procurement Plan will serve as a precedent for future DG procurements, ISEA, representing both these small businesses and homeowners, is concerned about potential shortfalls regarding system <25kW goals. We believe that the process as currently outlined will be elusive and cumbersome to small business and homeowners. Additionally, we are uncertain if the Supplemental PV Procurement Plan will successfully ensure variety within the 25 kW to 2,000 kW category and have already begun witnessing negative impacts resulting from such a large classification of system sizes.

### **Section 3.1: Resource Selection - Definition of “new”**

*In Section 3.1 of the draft plan, the IPA states that the supplemental PV procurement will be for RECs from “new” DG photovoltaic systems. The IPA defines a “new” system for the first procurement event as a system that has been energized on or after the date at which bids are due in the first procurement event. For subsequent events, a system will be considered “new” if it was energized on after the bid date of the preceding procurement event.*

Although the rules have not yet been approved, the IPA’s proposed definition of “new” systems has already created an unintended chilling effect on the current market, both for commercial and residential systems. Solar Service Inc. has reported that on September 30<sup>th</sup> they were contacted by a customer who has been following the procurement rulemaking process. Although this 35 kW project is nearly ready for permitting, the customer is considering changing the date of the installation per the definition of “new” within the Special Procurement on the speculation that these RECs could yield higher value and have a greater immediate impact on their investment and financing options. Additionally the customer is considering reducing the size of the installation from 35 kW to 25 kW, believing that the energy savings over time will not outweigh the potential gain from a higher valued REC. This customer has concluded that a REC for a 35 kW system will be significantly lower because it will be priced at the same rate as a 2MW REC.



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In addition StraightUp Solar reports that a customer who recently received a Notice to Proceed from the Department of Commerce and Economic Opportunity (DCEO) Solar and Wind Energy Rebate Program has delayed the installation of his system until the definitions of “existing” and “new” have been determined. Although the project is ready to be installed this October, he has delayed construction because he will likely get a higher REC price if his system is identified as “new”.

ISEA is concerned that there has already been an immediate and negative impact on the industry. As installers and customers become familiar with the procurement process, as currently identified, it is highly likely that the trends to adjust system size and installation timing to ensure a higher REC price will significantly and negatively impact the industry.

As the RPS has been broken for several years and a permanent fix has not yet been established, ISEA and member business request that the IPA make some concessions for “existing” as well as “new” systems. System owners who have recently installed, may have anticipated a working RPS when purchasing their solar installation. Therefore ISEA recommends that “existing” systems be defined as those that were energized between July 1, 2013 – June 30, 2014 (or the equivalent of Energy Year 2014). “New” systems would then be defined as those that were energized after July 1, 2014 (or the equivalent of Energy Year 2015). This recommendation ties the definition of “new” to the passage of HB2427 **as opposed to the definition in this draft procurement plan**. This would then be a meaningful indicator to the market that a new policy has been established in IL.

It is our opinion that in adopting these revised definitions that the IPA would be well positioned to conduct a successful procurement in June 2015. This procurement would then likely have a positive impact on immediate installation opportunities and maximize statewide economic impact for system owners and system installers.



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## Section 3.3: Converting System kW size into RECs

In Section 3.3, the IPA proposes a standard capacity factor of 11.416%, which translates to 1,000 kWh/kW DC. Average capacity factors for photovoltaic DG systems in Illinois are between approximately 10.5% and 14.5%. The Agency proposes a standard capacity factor of 11.416%. The standard capacity factor will be used for calculating the number of RECs that would be produced over the life of the contract.

Table 1 below provides a Year 1 kWh/kW DC comparison using National Renewable Energy Lab (NREL) PV Watts for the same system installed in Rockford (North), Chicago (Northeast), Springfield (Central) and Carbondale (South).

**Table 1**

Location	(kWh/kW DC) <sup>1</sup>	First Year Production (MWh) for Various System Sizes					
		50 kW	100 kW	300 kW	500 kW	1,000 kW	2,000 kW
Rockford (North)	1,234	62	123	370	617	1,234	2,468
Chicago	1,214	61	121	364	607	1,214	2,428
Springfield (Central)	1,303	65	130	391	652	1,303	2,606
Carbondale (South)	1,292	65	129	388	646	1,292	2,584
<i>Average</i>	<i>1,261</i>	<i>63</i>	<i>126</i>	<i>378</i>	<i>630</i>	<i>1,261</i>	<i>2,522</i>
<b>Proposed IPA 11.416% Capacity Factor-Based Production</b>	1000	50	100	300	500	1,000	2,000
Springfield vs IPA (MWh), Year 1		15	30	91	152	303	606
Springfield vs IPA (\$)², Year 1		\$ 1,515	\$ 3,030	\$ 9,090	\$ 15,150	\$ 30,300	\$ 60,600
Chicago vs IPA (MWh), Year 1		11	21	64	107	214	428
Chicago vs IPA (\$)², Year 1		\$ 1,070	\$ 2,140	\$ 6,420	\$ 10,700	\$ 21,400	\$ 42,800
<small><sup>1</sup>PVWatts: 180 degree Azimuth, 10 degree tilt, 14% system loss, Fixed roof, no shading, standard module, all other parameters left at default values  <sup>2</sup>\$100 SREC</small>							

The table demonstrates the loss of SRECs (and therefore revenue) for DG system owners if a nominal capacity factor of 11.416% is used. Although all bidders will be competing against an identical production factor, whatever it may be, and the market will eventually over time settle on the lowest SREC price a developer can accept and still proceed with the project, ISEA believes it is important that the one-time Special Procurement consider a more representative capacity factor. ISEA suggests a capacity factor of 14.38%, which translates to the average Year 1 production of 1,261 kWh/kW DC as shown in the above Table 1.



## **Section 4.2: Qualification of Systems to Deliver RECs (Subcategories for projects between 25 kW – 2,000 kW)**

*As outlined in Section 4.2, the IPA created two categories of systems eligible to participate in procurement events: systems under 25 kW and systems between 25 kW and 2 MW.*

Given the vast differences in development costs and basic economics for systems between 25 kW and 2,000 kW, ISEA strongly recommends that the IPA consider subcategories within this segment along with corresponding confidential benchmarks to ensure diversity of awarded projects and broaden opportunities for participation. The ISEA recommends two subcategories: one category for systems between 25 kW – 399 kW and another category for systems between 400 kW – 2,000 kW.

The costs and financing of PV systems vary substantially by system size. If the IPA chooses to not develop multiple tiers for projects over 25 kW, the likely outcome is that smaller commercial systems will be priced out of the market, limiting development of that business sector as the economics may not work out strongly enough to entice prospective buyers to make the investment. Also, a bid that is on the lower end of this market segment spectrum is unlikely to win against a bid for a larger system. It is assumed that REC pricing for 2,000 kW systems will be significantly lower and may not have the desired economic impact for smaller sub-categories given the very different economics between 25 kW and 2,000 kW. The program will therefore favor large systems and may not yield a diverse development of projects.. Creating subcategories within this market segment gives all projects a chance to compete against projects of similar size and characteristics.

In other states that have competitive solicitations, the programs are typically designed to have multiple tiers within the commercial segment to incentivize small commercial projects. For example, the Connecticut ZREC program is designed so that medium (100-250 kW) and large projects (>250 kW - 1 MW) compete only within their segment for program funds. The Delaware REC competitive solicitation also has two tiers within its “large” category of 30 kW - 2 MW. Smaller systems (between 30 to 200 kW) and larger systems (between 200 kW to 2 MW) do not compete against each other for REC contracts.

Furthermore and of great concern, the lack of categorization could have an unintended negative consequence, particularly on systems > 25 kW but still relatively small. As previously mentioned, Solar Service has reported that they have a customer strongly considering downsizing their 35 kW array to <25 kW to potentially qualify for a higher REC price. The customer expressed a valid concern that a 35 kW system would be lumped in with what will likely be considerable lower pricing that applies to systems up to 2,000 kW.

As summarized by GSM Development in the August 7th workshop presentation, 6 out of 12 respondents suggested multiple procurements based on system size. There is strong support from the solar industry to create 2 or 3 size ranges within the 25 kW and 2,000 kW segment. The IPA itself recognized in the Draft Supplemental Photovoltaic Procurement Plan that “the 25 kW to 2,000 kW class may not be completely homogeneous.” The IPA states that it will track the number of projects submitted in the over 25 kW category and use the information to design the contingency procurement event and future procurement events; however, ISEA does not believe that this will be sufficient to encourage small commercial development in the supplemental procurement events.



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ISEA believes that the IPA has the latitude to broaden their interpretation of the guidelines and develop a plan that will create strategic opportunities for the solar market, both from a developer and consumer perspective. As the special procurement bill did not have the benefit of being on the floor for full debate, it is our contention that the legislature did not intend to pass down the <25k and 25kw to 2000 as a strict guideline but more as a delineation between residential and commercial solar, recognizing that each has a unique and valuable role in the market. ISEA contends that the IPA has the opportunity to write a procurement plan that expands this concept and creates a stable, diverse and successful plan to ensure greater adoption of solar throughout all market segments.

The ISEA believes that by encouraging development of a wide variety of project system sizes, the solar industry in Illinois will be a stronger industry in the long-term. The creation of subcategories will facilitate success in this young industry.

## **Section 4.2.2. Systems 25 kW and over (Bid Documentation)**

*For bids in the 25 kW and over category, a bidder must identify the specific system(s) that will provide the RECs prior to bidding. Evidence regarding the systems may include, but is not limited to, letters of intent, signed contracts, interconnection or net metering applications, local permits, and similar official documentation.*

The ISEA asks the IPA to clarify the document requirements to be provided as evidence for identified projects. Potentially some of the proposed required documentation may unintentionally restrict developer participation in the procurements. Requiring local permits and a signed customer contract during the initial application process will cause unnecessary burden to the applicant. Typically, installers do not incur development expenses, such as applying for local permits or interconnection, without first securing incentive funds. The state-wide and variable permitting and interconnection process and requirements for large and small projects are subject to unpredictable delays out of the developer's control, which may prohibit competitive bidders from participating in upcoming procurements. Additionally, some customers prefer to know the awarded bid price before signing the contract with the installer. By requiring the customer contract at time of bid submission, the developer will then be required to amend the contract later on if awarded, or void the contract if the project loses.

We believe requiring the \$10/REC deposit, system details and a standardized letter of intent is sufficient evidence to ensure real projects are bid into the over 25 kW category.

## **Section 4.3: Credit Requirements**

*Section 4.3 summarizes the credit requirements for the bid registration process. The IPA requires a deposit of \$25/REC for speculative RECs and \$10/REC for RECs associated with identified systems. Based upon the standard capacity factor, this equates to \$125/kW for speculative systems and \$50/kW for identified systems.*

ISEA believes that the refundable deposit amounts proposed in the draft plan will create a significant barrier to small local Illinois solar companies and nonprofits seeking to participate in the solicitations. ISEA recommends a refundable bid deposit of \$10/REC for speculative RECs and \$5/REC for identified systems.



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ISEA advocates for a single 3rd party administrator for both the Special and Regular procurements. We contend that the requirements currently identified will cause confusion amongst consumers and market capability by installers. If smaller installation companies are not able to meet this significant financial benchmark for participation, their existing customers whose systems have not yet been installed will need to seek REC contracts with either a nationally established REC aggregator or a local installer who successfully bid into the IPA REC procurement process. This could be confusing to systems owners who will then need to shop their systems around to new parties potentially offering different REC prices.

Furthermore, the inability to sell RECs in the open market could pose a competitive disadvantage for solar developers who might be competing with a company that was accepted as an aggregator as this could now keep small businesses out of the market. These small local businesses would not be able to compete with companies able to provide RECs as a service to prospective system owners. The companies who are able to include the REC purchase in their proposal will show a more attractive payback period.

From a consumer perspective, the selection of a solar installer should not be based on their ability to meet a credit requirement but on their merits to install a quality product. ISEA is concerned that consumers may become overwhelmed by the myriad of choices and will opt to do nothing.

The use of a Program Administrator for systems under 25 kW would allow for a more equitable opportunity to all size installers. A program administrator also ensures a more consumer friendly market, a single source and process for system owners, greater transparency and simplicity from which future procurements could be executed and altered. Using multiple aggregators as a starting point with varying process and pricing will create consumer confusion and has the potential to limit and greatly hamper system purchase decisions and therefore suppress the industry's ability to grow and the IPA's ability to execute a successful REC procurement and drive the 2025 RPS goals.

## **Section 5.2.4: Benchmarks**

*In Section 2.2.3 & 5.2.4 of the draft plan, the IPA and Program Administrator will use confidential benchmarks to evaluate the bids. All winning bids will be below the benchmarks developed "for each product procured."*

As referenced and supported in previous sections of this document, ISEA proposes that the IPA develop three separate benchmarks for the three products as the REC prices will vary significantly between the different project sizes. We recommend benchmarks for systems less than 25 kW, systems between 25 and 399 kW and systems between 400 and 2,000 kW.

## **Conclusion**

ISEA respectfully submits these comments and requests that the IPA adopt the recommendations set forth in this document. A competitive bid for all product classes will be confusing to the <25 kW market and could have a negative impact on the industry in the identification and development of these assets. The overarching goal of this and other procurements should be the stimulation of a robust solar energy industry in Illinois, one that benefits all state stakeholders, including asset owners and installers. Ensuring a simple and transparent process will provide the necessary economic and business conditions for achieving this goal. Additionally, not all market segments are the same and therefore it is imperative to create subcategories



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within the "large" DG market. This will ensure project diversity that is good for all parties and will generate the long-term clean energy goals intended by the state legislature. The proposed definition of "new" for the supplemental procurement has already caused an unintended chilling effect on the current market. To counteract this chilling effect, ISEA recommends using the passage of HB2427 as an indicator to the market that a new policy has been established in Illinois that supports the immediate development of DG solar in the state. The definition of "new" should stand for future procurements including November 2015 and March 2016.

The opportunities and risks surrounding this first supplemental procurement plan are critical and this first offering should be simple on all levels. This will ensure that Illinois will avoid costly and painful mistakes experienced by other states while providing the flexibility for improvements for future DG procurements. It is critical that we move forward cautiously but expeditiously to create a model that works in Year 1 and ensures that state goals can ultimately be achieved in a cost-effective manner.