



September 14, 2011

## COMMENTS TO THE ILLINOIS POWER AGENCY REGARDING THE 2012 DRAFT PROCUREMENT PLAN

Recurrent Energy, a distributed solar independent power producer (IPP), develops, owns, and operates solar projects ranging from less than 1 MW to 200 MW each, in the U.S., Canada, France, Germany, Spain and Israel. Starting with a team of about a dozen people in 2007 and having grown to over 100 today, Recurrent now has nearly 500 MW of solar projects operating, in construction, or under contract, and some 2 GW overall in our development pipeline. We are pleased to participate in the review of Illinois Power Agency's 2012 Draft Procurement Plan (Draft Plan).

### Background

Recurrent Energy strongly supports the principles regarding renewable energy contained within the IPA Act of 2007, specifically that the IPA shall... "develop electricity procurement plans to ensure adequate, reliable, affordable, efficient, and environmentally sustainable electric service at the lowest total cost over time...".<sup>1</sup> With international experience in numerous different energy markets Recurrent Energy brings a strong understanding of the effect different policies and market structures can have to engage the renewable industry, and specifically the solar development community.

In our comments today, we strongly suggest to the IPA that to best meet the statutory requirement for delivering a procurement plan that ensures the "lowest total cost over time" while complying with the solar carve-out provisions in the renewable portfolio standard, it must develop a plan that attracts utility-scale solar developers. This type of development is best aligned with a non-recourse financing

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<sup>1</sup> Public Act 095-0481

structures<sup>2</sup> and facilitate cost reductions from economies of scale and the lowest possible financing costs available. Until utility scale developers are actively competing within the Illinois market the IPA will be forced to procure second tier RECs from the expensive and highly unpredictable spot market.

In 2011 the functioning markets with strong competition and conditions that allow for predictable financing such as California, Arizona, and parts of Texas, have contributed to the lowest long term contract bids for bundled products (RECs + energy) ever seen in the US. Indeed, solar in some of these markets is at or pennies away from grid parity with conventional gas plants operating during peak demand. To reach this price point, Regulators in each market have engaged market actors in public proceedings to determine what they require to make strategic decisions and calculate and balance risk. We encourage the IPA to take such an approach prior to development of the 2013 Draft Plan with a goal of Illinois emerging as a market that provides the stability to attract substantial investment in developing low-cost solar generation.

#### Critique of Renewable Energy Resource Section of the Draft Plan

Of foundational importance to the capital-intensive development of any type of renewable asset is the presence of an expanding market and the long-term clarity that allows for capital investment. Section 3.6 of the Draft Plan opens with Table R listing the key issues regarding the procurement of renewable energy. One bullet states that, “(t)he annual RRB [*renewable resources budget*] is expected to decline over time as the total IPA portfolio volumes decline.” This statement and others contained in Table R bring great uncertainty to the state of the Illinois market for solar. Table R and the discussion within the entire Renewable Energy Resource section do not clearly articulate whether the IPA expects to achieve procurement compliance. Accompanying Table R, a table or graph would greatly assist in comprehension of the intended meaning. A market that is not expected to expand offers many opportunities for legislative attention.

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<sup>2</sup> Due to the scale of most residential and commercial rooftop systems, commercial banks do not offer competitively priced non-recourse financing as projects are viewed as very complicated and risky from a commercial bank perspective.

Because renewable developers such as Recurrent Energy have witnessed that the effect of market expansion is increasing pressures of competition and the resulting decline in prices, it is critical to understand if and why the IPA expects any form of success with the opposite. We feel that market stability is a crucial element to ensure strong market participation and therefore competition. As an experienced solar developer with a strong track record for squeezing cost out of projects, Recurrent Energy may find an imperfect competitive market to be attractive provided that the procurement needs are certain and of great enough capacity to balance the risks other imperfections carry, however, there is currently not enough procurement certainty for solar products in the Draft Plan.

It is clear within the Draft Plan that the 2012-13 energy year will be the first where the solar carve-out comes into effect representing ½% of the total RPS rising to 6% in 2016. Recurrent Energy applauds the Illinois Legislature for recognizing that this carve out is necessary to avoid the situation experienced by Texas where the RPS has resulted in relatively little resource diversity. Texas, as a result of their RPS policy leads the US in installed wind capacity, but a lack of diversity can lead to achievement of a clean energy mandate without many of the benefits clean energy is able to bring such as improved air quality, peak shaving, price hedging, maximized path utilization, not to mention in-state economic development.

In Illinois, uncertainty that the RRB can cover the entire RPS requirement leaves solar developers lacking assurance that execution of the Procurement Plan will procure solar products at all. As evidenced by some comments to the 2011 Draft Procurement Plan, some parties suggest that the diversity intended by the legislature ought to be secondary to REC price. The IPA should not only clarify their intent to procure ½% of the RECs necessary to comply with the 2012-13 RPS requirement, but they should state what volume remains to be procured after the 2010 Renewable RFP results are accounted for and provide a method for procurement that explicitly provides for both the solar and the wind carve-out, or discusses how they will each be affected. Without a clear presentation of this level of detail the Draft Plan adds far too much risk to any solar developer dedicating serious resources to serve this market.

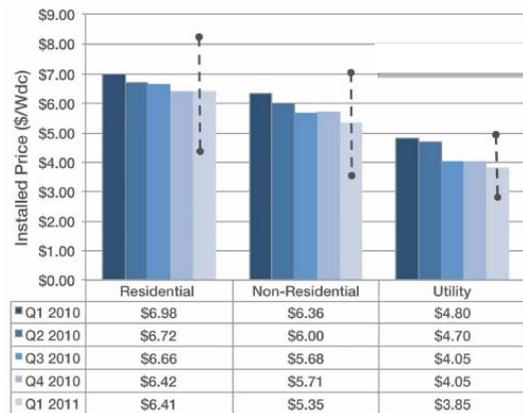
The Draft Plan at page 49 requests, *“more than any other section of the Draft Plan,...”* feedback on its Recommendations for procuring to meet the state’s RPS obligations. All together, the procurement recommendations appear to try to chart a course out of the gloomy market prognosis for

solar developers the bulk of section 3.6 describes. In general the recommendations attempt to describe how transparency will be improved, certainty will be increased, and procurement will result in minimum compliance with the carve out requirements of the RPS. These recommendations represent a good start, but they must be revised to provide a great deal more confidence to solar developers who offer the lowest cost compliance option to the growing solar carve out requirement. Our comments on these recommendations can be divided into two primary themes: Market certainty and Market design.

Market Certainty

Market certainty is critical. Although not explicit in the Draft Plan, the solar carve out at its peak may require on the order of 500 MW of solar capacity in 2016 to achieve compliance, even using the highest estimates of potential retail switching. Utility scale solar under long-term contracts will yield the lowest cost, most predictable source of solar electricity for RPS compliance purposes. There are huge economies of scale when moving from residential to commercial to utility scale power plants enabling developers to engineer the lowest cost compliance for IPA. Figure 1 below is taken from the 2011 Q1 Solar Market Insight report produced by the Solar Energy Industries Association<sup>3</sup>. The graphs in Figure 1 demonstrate the greatly lowered cost of utility-scale solar that is showing up in competitive markets now, and at likely lower levels in 2012 and beyond.

**Figure 1: National Weighted Average Installed System Price**



<sup>3</sup> 2011 “US Solar Market Insight” Report. Solar Energy Industries Association & GTM Research

The IPA should note that the range of prices demonstrated in Q1 2011 average \$3.85/Wdc but have broken into the \$2.90/Wdc range at the lowest levels. These reduced costs will only be accessible to the IPA if utility scale solar developers are invested in engineering projects for the Illinois market.

We recognize that in 2011 solar is currently a more expensive required energy resource when compared with the wind carve out requirement. This discrepancy will persist in Illinois unless the IPA focuses on how to harness market forces to drive that cost down. To not harness market forces to drive solar costs down is to choose instead an annual increase in the waste of ratepayer funds due to the growing solar carve out requirement. We suggest that the IPA use the revised Renewable Energy Resource section of the Final Plan to lay a foundation for building a robust solar market in Illinois.

The first thing the IPA can do to attract prices aligned with those installed costs presented in Figure 1 is to improve the certainty that a market exists for solar developers to compete in. This can be done by making a more explicit commitment in the Final Plan to procuring to meet the solar carve out requirement in 2012 and every year after. Nothing stifles investment in a new market like uncertainty, and the language used by the IPA in their Final Plan can go a long way to comfort and attract interest in Illinois by solar developers.

In addition, the IPA should be explicit in its description of the budget for complying with the RPS. On page 51 and 52 budget tables are presented with wildly varying results for the gross budget of both Ameren and ComEd. For example, Table Y presents the Option A methodology for calculating the gross budget and arrives at a result of \$2.9 million. This is a drastic difference from the result of Table Z presenting the result of Option B as \$52.1 million. The discussion and presentation of Tables U through Z avoids providing a conclusion of what the final gross budget will be, let alone the net budget when accounting for current contracts. The absence of such a budgetary conclusion of which methodology the IPA will use, and what the net budget may be as a result is glaring when contrasted with the explicit reminder in multiple places that volumetric compliance is waived when the budget cap is met.

For the IPA to capture the lowest priced compliance possible with the solar carve out requirement it must consider what type of developers can provide prices at the leading edge of the solar market and work to attract that segment of the industry to Illinois. Simply stating rules and seeing who shows up is will result in mediocre results.

## Market Design

Market design is equally as important as market certainty. Recurrent Energy commends the IPA for its use of scheduled competitive auctions as opposed to a reliance on bilateral deals. This open and structured process invites participation by confident developers ensuring that competitive forces will be leveraged. However, the product for which the auction is designed will have a great influence the cost IPA pays in the end. A generic auction for 1 - 20 year RECs may be by definition competitive, but it will not attract competitive developers able to consistently wring cost out of solar projects and deliver the lowest cost compliance IPA is committed to achieving.

It is our experience that long-term contracts of 20 years will allow for non-recourse financing at very favorable rates and allow developers to pass the savings to the counterparty in the form of highly competitive prices. Such financing requires a long term revenue stream for utility scale projects (non-recourse financing requires scale that is harder to attain through commercial rooftop or residential rooftop scale projects) to demonstrate reduced risk and lower interest requirements. Additionally, the best financing comes from sale of a bundled product, which avoids the additional costs of multiple transactions for the same project and eliminates a significant additional layer of risk to the financing entity. Because it is our understanding that IPA also procures the conventional energy and capacity resources for Ameren and ComEd, and because the renewable contracts the IPA entered in December were bundled, we suggest that favoring bundled products for renewable compliance would greatly improve the attractiveness of the Illinois market and should be considered “low hanging fruit” by the IPA. For these reasons, Recurrent Energy strongly suggests that the IPA should adopt a procurement structure that encourages price reduction by favoring long term bundled contracts.

However, we are not ignorant to the hesitancy to lock up too much of the compliance with the solar requirement in a market with as much growth and rapid cost reduction as solar currently has. Recurrent recommends two auctions per year at least for the solar requirement to hedge against falling REC prices<sup>4</sup>, and invite new developers into the process.

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<sup>4</sup> The National Weighted Average System price has dropped ~20% from Q1 2010 to Q1 2011, largely driven by the significant decrease in global prices for PV panels with additional reductions expected.

## Closing

In closing, Recurrent Energy recognizes the complexity and effort required to design and implement a procurement plan in a state with such active migration to competitive providers is massive. We are pleased to participate in the review of the 2012 Draft Plan. Going forward we commit to working with IPA and eventually the Illinois Commerce Commission to develop a Renewable Procurement portion of the Final Plan which is best able to capture the lowest prices for compliance with the solar carve out requirement.

Respectfully submitted,

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