

[Commenter 12] appreciates the opportunity to comment on the IPA’s procurement of utility-scale solar facilities located on brownfields (“brownfield solar”).

[Commenter 12] specializes in developing commercial and industrial solar PV projects ranging in size from 5-20 MW. A specific focus of [Commenter 12]’s development work is on re-purposing environmentally impacted former industrial properties, including brownfields in the Midwest. [Commenter 12] was initially interested in participating in the brownfield solar procurement event in October 2018. However, [Commenter 12] decided against participating due to several aspects of the initial procurement.

The good news, from [Commenter 12]’s viewpoint, is that many of the issues are solvable within the framework of an IPA procurement. While some of the solutions may go a little bit outside the box for typical IPA pay-as-bid procurements, some flexibility is necessary given the highly specialized nature of this procurement.

### **Introduction**

Before detailing specific recommendations for the adapting the current framework of the IPA procurement, it is useful to provide [Commenter 12]’s systematic approach to this and other brownfield solar PV projects.

Any re-purposing/re-development of a brownfield site reflects the same components, metrics, and financing requirements as a real estate project. Whether the end result is a solar PV project, a distribution warehouse, a data center, a market rate high-rise apartment building, or a public space (from a public park to a convention center) — the improvements are: (i) long-lived; (ii) designed and constructed to meet specific local demand; and (iii) funded by longer term financing. Deciding to use a brownfield site for re-purposing simply means any project on that land will be more complicated and expensive because the project must first undertake the processes to assess, evaluate, design mitigation and monitoring, and secure approvals before any re-purposing work can begin.

Solar PV generation is only one potential use of an environmentally impacted parcel but frequently a good one for several reasons.

*First*, installing solar PV typically involves minimal excavation or disturbance of soil especially compared to other development options.

*Second*, many environmentally impacted properties (former industrial sites) are located near distribution or transmission assets for easier interconnection.

*Third*, human exposure pathway mitigation is more manageable than other uses.

On the other hand, with environmentally impacted properties it is frequently impossible to fully delineate the full contamination. Progressively more complex, intrusive, and costly investigations (Phase I, Phase II, Phase III, etc.) provide more information, but the full extent of contamination—and thus potential liability—is never fully known or knowable. Instead, an expensive and open-

ended diligence process may be necessary to fully assess and evaluate the environmental risks of developing or operating on site. It is common for a thorough technical diligence process to last 18-30 months before adequate evaluations, plans, and approvals can be finalized.

It is important to note that while technical diligence may take less time for the developer to reach critical conclusions and findings about site conditions, rarely is the developer making a unilateral decision. Instead, the developer must work with parent companies, financing parties, joint venture partners, and the like as applicable—each of whom has a separate standard and process for environmental diligence. This is particularly true for established financing parties and financial intermediaries because their cash investment is largely funded from the regulated public markets. Established financing parties are mandated to minimize the risk of being found to be a current owner or operator (and thus potentially liable party) under federal environmental statutes such as CERCLA. Securing participation from the necessary parties to the financing of a solar PV project on a brownfield site, therefore, does not rely simply on results of technical diligence. Any financing can be expected to require complex and highly technical approvals from U.S. EPA or (in this case) Illinois EPA.

For these reasons among many others, a beneficial but simple-sounding transaction (“build solar PV on a brownfield”) is actually highly complex and risky at any one particular site.

## **Process Improvements**

### **Recommendation 1: Redefine Development Obligations**

The IPA should allow for an 18-24 month diligence period during which a winning bidder may walk away from the project without penalty. While this approach is contrary to the IPA’s approach in virtually every other procurement, the specific transaction at hand justifies the divergence.

In every IPA bid, there is an assumption that every winning project that is selected should go forward. Simply put: By the time a pay-as-bid procurement event is held for brownfield solar, there is still substantial diligence based on timelines alone (not to mention decisions to spend on diligence before a procurement decision has been made). For some products that the IPA procures, such as standard wholesale energy products, this approach makes a lot of sense. Even for utility-scale development, many developers have been working on projects before bidding and have a good sense of diligence on what they can deliver.

For brownfield solar, given the limited opportunities and intrusive and expensive environmental diligence, it is not reasonable to expect developers to have conducted full diligence at the time of the bid. Except in the rare event a third-party has already undertaken diligence and the developer may legally rely on it (for instance to meet the All Appropriate Inquiries standard), it would not be commercially reasonable to have done the diligence that addresses the biggest risk (environmental).

Not penalizing the winning bidder who must walk away based on environmental diligence is the best way to address this issue. Such a developer will already have their bidder fees and diligence costs at stake; their “interest” in proceeding should not be an issue.

While [Commenter 12] understands that this could lead to delays in development of brownfield solar, fatal flaws during environmental review will happen without regard to whether the IPA imposes a penalty on the developer for not going forward. While the risk of delay in getting brownfield solar is real, the better question is: relative to what? Given that virtually all bidders will have the same issue (again, with the narrow exception of when a third party has conducted diligence that a third party may legally rely on), the IPA should recognize and address the issue rather than attempting to punish the issue out of existence.

It is certainly possible that this approach would mean the procurements are an iterative process. However, [Commenter 12] believes the increase in quality and quantity of applicants will more than make up for the potential for delay (and also provide several suitable alternatives).

For these reasons, [Commenter 12] recommends that the IPA provide for an environmental diligence period of 24 months during which a winning bidder may walk away from the REC contract without penalty.<sup>1</sup> The IPA could either go with alternative bidders or run a shortened procurement event to make up for lost volumes—the same lost volumes it is likely to have faced anyway.

## **Recommendation 2: Benchmark and Adders**

For every pay-as-bid procurement, the IPA's Procurement Administrator develops a confidential benchmark that effectively serves as an (undisclosed) maximum bid price. While [Commenter 12] has seen other approaches elsewhere, there is nothing inherently fatal to procurement of brownfield solar of this approach. However, it does place tremendous pressure on the Procurement Administrator developing an accurate assessment of costs and revenues.

[Commenter 12]—like all outside parties—does not know how the Procurement Administrator developed its benchmark. However, to the extent it is not already, [Commenter 12] recommends the next benchmark be developed consistent with the following observations:

- **Increased diligence costs.** As explained in-depth above, environmental diligence for both the developer and the necessary and financing parties is substantially higher than for a greenfield project. While costs will vary for each project, a typical brownfield project can be expected to have at least \$300,000 to \$500,000 in extra costs depending on the size of the solar PV project measured in MW of AC peak production. These should be considered costs of development.
- **Increased construction costs.** In most if not all cases, ground-mount solar panels on a greenfield are anchored below the surface. In most if not all cases, ground-mount solar panels on a brownfield are not anchored in order to avoid disturbing the soil but instead are secured by a system akin to pontoons to keep them stable on the land but not anchored below the surface. The latter is a more expensive construction.
- **Energy revenues are likely capped at the applicable QF rate.** While other wholesale arrangements are possible, it is unlikely that a brownfield solar facility that is selling its

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<sup>1</sup> One way the IPA could mitigate this risk is placing a maximum bid size per site of 5MW or 10 MW, meaning that the IPA would not be reliant on a single project going forward.

RECs via this procurement process will be able to secure a higher rate in a bilateral contract. This is important because while the Procurement Administrator may be able to project a general trend—for instance, 1-2% increase in QF rate *per annum*—there is substantial variation in even the fixed QF rates offered by ComEd and Ameren year by year. In other words, the fixed QF rates do not reflect ratchet-like increases, and instead tend to swing upward and downward. That uncertainty creates risk even if the general trend remains upward.

- **Size Assumptions.** While the IPA is procuring up to 20 MW of solar, there is a substantial difference in costs between a 20 MW facility and a 5 MW facility if expressed in terms of \$/Watt. That certain fixed or near-fixed costs are similar across those sizes of facilities. Thus, a 5 MW facility is at a disadvantage relative to the benchmark unless: (1) the benchmark is based on a size-sliding scale, or (2) the benchmark is based on a 5 MW facility or less.

[Commenter 12] also recognizes that the IPA has not historically included adders in pay-as-bid procurements. However, not all brownfields are created equal—specifically, not all are in Environmental Justice (“EJ”) areas. While the IPA could treat all brownfields equally, as a matter of policy the IPA should favor brownfields in EJ areas. The IPA could add a fixed adder—for instance, \$5/REC, for brownfield sites that at the time of the procurement event can demonstrate that they are in an EJ area. This fixed adder will allow some combination of enhanced revenue for EJ area-based development and more aggressive price bidding (knowing that the adder will be included).

### **Recommendation 3: REC Delivery**

Due to challenging topographies of some brownfields, a system’s as-built capacity factor may be lower than anticipated during the planning stage. Instead of having developers intentionally underestimate their capacity factor, the IPA should allow adjustment of capacity factors at energization.

In addition, it makes little sense given the statutory goals to terminate a brownfield solar contract for “under-delivery.” Unlike, for instance, the Adjustable Block Program (“ABP”) where payments are heavily front-loaded, a brownfield solar REC Contract can be paid as generated. In other words—to the extent the IPA was concerned in that context—there is strong incentive here for the developer to continue with strong O&M practices to preserve their revenue stream.

In addition, the statutory requirement of procuring a certain number of RECs per year from brownfield sources must be read as a directive to procure, not a cudgel to wield against developers for weather patterns they do not control—especially given that the utilities and the IPA face no penalties for procurement shortfalls.

Punishing solar developers for not meeting a precise REC value without any upside for over-producing (and without the presence of front-loaded contracts) makes little sense. There are at least two primary ways to respect the statutory mandate while removing the unnecessary risk on development:

- If the IPA is open to removing the provision for termination upon three years of under-delivery, the contract should simply provide for annual payment for RECs generated up to 100% of the estimated annual quantity. To the extent that the IPA has not procured sufficient qualifying brownfield solar RECs in a particular year, the IPA should have the option to procure for utilities the over-generated RECs at the contract rate (which is by definition “cost-effective” because it already was under the benchmark).
- If the IPA is not open to removing the provision for termination upon three years of under-delivery, the contract should allow for purchase of up to 120% of the estimated annual REC quantity and developers will adjust their capacity factors accordingly. Otherwise, their risk may be intolerable to financing parties or other necessary parties when the developer has limited control over sight topography or other site features.

### **Conclusion**

[Commenter 12] thanks the IPA for its consideration. [REDACTED]