IPA Brownfield Site Photovoltaic Procurement Request for Comments

Response to Question 1:

We strongly recommend that IPA change the definition for a brownfield sites to include sites currently OR previously regulated under one of those four programs. For example, a landfill project that we have has been closed long enough for its closure period to have passed. Thus, while it may not still be regulated under one of the four programs listed, it remains a brownfield site in all other regards.

Response to Question 2:

Yes, we feel that having been regulated under the applicable program within the last 15 years is too restrictive for reasons described in our Response to Question 1.

Response to Question 4:

We did not feel this was too onerous of a deadline. While certain brownfield sites would require a longer timeline to develop depending on what permits and/or remediation might be required, this criterion ensured that certain sites were stricken from consideration for development based on our analysis.

Response to Question 5:

With brownfield sites, there can be circumstances where issues arise due to reasons NOT caused by the construction or operation of the solar facility and which could not have been foreseen as a risk to the developer prior to construction, despite commercially reasonable diligence efforts. Such instances may require further site remediation from regulatory directives during the term of the REC contract. For these types of circumstances, we strongly recommend an explicit inclusion to allow for REC contract term extension or additional time to cure failures to delivery of RECs.

Response to Question 6:

We learned about the Brownfield Procurement via the Long-Term Renewable Resource Procurement Plan (LTRRPP), and subsequently from the IPA email list. We do not think lack of awareness of the procurement was an issue.

[Confidential] Response to Question 7:

[redacted]

[Confidential] Response to Question 8:

[redacted]

Additional Response:

While the IPA has recognized that at least some projects may not have been considered for selection due to the application of the confidential price benchmark, we feel it is important to describe a few of the main cost drivers that may pertain to brownfield sites that would otherwise not pertain to utility-scale projects. We do so with the hope that the IPA will take these cost drivers into consideration (if they haven't done so already) when establishing the price benchmark for future Brownfield Procurements.

- Given the potential for contamination, ground penetration for racking and conduit is often prohibited for brownfield development. This has two main economic impacts on the project:

    1. This requires the use of more expensive concrete ballasting in lieu of the cheaper and more efficient use of driven piles, which is typical for both fixed tilt and tracking ground mount systems.

    2. Concrete ballasting cannot support a tracker system, which means that compared to a system capable of tracking the sun east to west throughout the day, the solar production of a fixed ballast system is significantly more limited.

       As an example, for similarly sited projects, a 15-year average capacity factor for a tracker system vs. a fixed ballast system can be the difference between 23.74% vs. 18.48% respectively in northern Illinois, and 24.86% and 19.9% respectively in southern Illinois. Further to this point, should the IPA have the goal of geographical dispersion of solar brownfield sites, it should be noted that the higher solar irradiance in the southern part of the state will favor the competitiveness of projects there, as those in the north will naturally need higher REC prices to counterbalance lower production.

- Unlike utility scale projects, given the typically limited size and useable acreage of brownfield projects, it is difficult to reach the economies of scale for procurement and construction realized by much larger projects. This limited scale in turn renders any revenue generated on the wholesale market insufficient to make the project pencil without sufficient REC prices given the low wholesale rates. While behind the meter projects (rare in our experience for brownfield sites given the typically limited onsite customer load) and virtual net metering projects (i.e. community solar) are able to capture more lucrative energy revenue through retail energy supply contracts, they are limited to 2 MW AC under current regulations. Thus, brownfield projects in Illinois are typically of a size too large to benefit from attractive retail supply contracts, and too small to generate sufficient revenue from wholesale markets without adequate REC pricing to help make the project economics work.