PINEGATE RENEWABLES

MEMO

To: Jaclynn Lukach, PJM
From: Brett White, Pine Gate Mid-Atlantic, LLC
Date: May 20, 2021
Subject: ELCC proposal

Message:

Pine Gate Mid-Atlantic, LLC ("Pine Gate") is a fully integrated utility-scale solar company and a leader in the strategic development, financing, construction, and long-term operational management of renewable energy projects in the United States. Pine Gate is also a full voting member of PJM. Pine Gate, like many other renewable developers, entered PJM because of the strong signals for clean energy demand and the liquidity of transactions built on the stable foundation of the PJM market. However, since Pine Gate made that decision, the ability of renewable resources to participate in PJM's capacity market has been tremendously uncertain, whether it be from the expanded Minimum Offer Price Rule ("MOPR") or the fluctuation of capacity accreditation levels resulting from PJM's implementation of its Effective Load Carrying Capability ("ELCC") methodology. While renewable energy and storage resources provide vital reliability benefits to the PJM system, the lack of rules that are clear, just, and predictable prevent renewable energy developers from being compensated for the true and full value of these resources. PJM should no doubt be applauded for removing the 10-hour rule for limited duration resources, but more work must be done on ELCC for variable and other resources.

Since PJM has decided to move forward with a filing pursuant to section 205 of the Federal Power Act ("FPA"), Pine Gate recommends that PJM incorporate the following in its revised ELCC proposal:

ELCC as a transparent and predictable methodology

Pine Gate implores PJM to provide full transparency to PJM stakeholders by releasing the ELCC model and data inputs so that developers may independently verify and model future ELCC values. With the ability to model capacity factors on a forward basis, developers will be able to fully capture the value of our projects with financing parties. This information will also allow developers to be more effective PJM market participants and create more opportunities for developers to add resources which more adequately contribute to overall system reliability.

The financing of our projects relies heavily on forward merchant curves and the ability to chart our revenue streams over the lifetime of our projects (which can be up to 40 years). As it currently stands (without the transition mechanism), we have two data points for only two years of potential ELCC values by PJM; there is also no ability to independently verify the posted results or run sensitivities on build rate to understand the risks associated with participation. This is not nearly enough information for our lenders to determine the projected capacity market revenues that projects will likely generate or to understand the risks associated with participating in the market.

The role of predictably is even more important when one considers the dynamic nature of ELCC. Annual updates to ELCC numbers will create inherent uncertainty. Even more urgent for solar resources, capacity values are expected to drastically decline over time due to increased penetration of similar technology. It is essential to understand the rate at which the capacity value of our projects is expected to decline to make sound financing decisions and to understand forward revenue streams.

During various stakeholder meetings, PJM staff has indicated that their intent is to provide enough information to stakeholders such that stakeholders are able verify and model future ELCC values. Unfortunately, Pine Gate does not believe that the present level of information provided to stakeholders makes this possible. Pine Gate has reached out to third-party consultants to attain a forward curve that we and our lenders could utilize to model future ELCC values. However, these efforts have proven unsuccessful due to the limited publicly available information.

PJM mentioned that it submitted information to FERC "under seal." That is not the same as being available and accessible to PJM stakeholders.

In conclusion, PJM should codify its commitment to transparency in its FPA section 205 filing and make the information needed to replicate ELCC available as soon as possible. This information is vital to improve market efficiency, unlock market access, and meet the needs of its stakeholders.

ELCC as an equitable approach to capacity performance

Pine Gate supports PJM's proposal to consider applying its ELCC methodology to all generation resources in Phase 2 of its capacity market reform process. We agree with other stakeholders that ELCC is a construct that can and should be applied to thermal resources. Furthermore, Pine Gate believes that it is not just and reasonable for a variable generator's capacity volume to decline rapidly over time due to factors outside of the project's control (e.g., new renewable capacity build) while a thermal generator's capacity will remain constant. It is also not just and reasonable to assess one type of resources based on actual peak load performance and another based on expected outage rates. Lastly, as we have seen this past winter in Texas, no resource is truly "unlimited" and therefore no resources should not be treated as such. This is particularly true when resources are tested under extreme weather events or other events that would create grid unreliability. Treating all resources in the PJM footprint in the same manner should also ensure that the proper retirement signals are being sent to generation that is no longer economical to stay in the market.

PJM should reiterate its plan to open the ELCC methodology to all resources, and we look forward to building on this discussion during the Phase 2 stakeholder process.

In conclusion, we ask PJM to consider these recommendations as it decides on the next steps for ELCC, and we look forward to future discussions.