



**First Solar Comments on September 27, 2019 Deliverability Assessment Methodology  
Revisions Draft Final Proposal  
October 18, 2019**

First Solar provides these comments in response to CAISO's September 27, 2019 Deliverability Assessment Methodology Revisions Draft Final Proposal. We also include comments on the stakeholder call CAISO held October 10 discussing opportunities for adding storage at new or existing generation sites, where CAISO dealt with issues relevant to the changes to its deliverability assessment methodology.

As we stated in our August comments, we appreciate CAISO's responsiveness to stakeholders as CAISO manages the challenges of a transitioning grid. We understand and agree with CAISO's need to shift its methodology to account for changes in the generation mix and are pleased that CAISO is considering impacts on congestion and curtailment. However, we remain concerned about several aspects of CAISO's proposal. We remain optimistic that these concerns can be addressed with some surgical changes to the proposal while maintaining the CAISO's timeline of implementation in 2020.

**1) Current energy-only projects should be offered an opportunity to compete for a deliverability allocation on equal footing with newer projects**

The CAISO's allocation methodology does not offer more mature energy-only projects the same chance to compete for deliverability as later queued projects. In this unique circumstance, where a change in CAISO's methodology is making more deliverability available, we believe that a one-time transitional process is critically important.

The upshot is that earlier queued energy-only projects in good standing and with the development maturity and investment that far exceed that of later-queued projects will not be afforded a chance to get a deliverability allocation without CAISO establishing a transitional process. For example, the option to proceed without a PPA would not be available to older vintage energy-only projects, since that provision is limited to projects that have just received their Phase II study results without parking.

The more mature energy-only projects should be provided a chance at an allocation on equal footing with later-queued projects. Failure to provide this opportunity is contrary to California's GHG reduction goals and current reliability needs. Given the recent concerns about a capacity shortage and the measures suggested to address it, including delaying retirement of OTC units, we believe there are strong policy and reliability reasons to allow energy-only projects the chance to obtain deliverability and consider adding storage to meet near-term needs.



Without a deliverability allocation, these resources will not qualify to supply resource adequacy. These issues are of critical importance with CAISO sounding the alarm about a capacity shortfall and as California looks to renewable and zero-emission resources to help fill the gap. Existing energy-only projects are best positioned to offer new hybrid resources into the upcoming solicitations to meet the significant resource gap the CAISO and CPUC have identified. These projects are the only ones likely to be operational by 2021-2023. Projects in Clusters 11 and later will not have the necessary development maturity to meet those timelines, particularly where delivery upgrades necessary to qualify for resource adequacy are involved.

In addition, there is a closing window on the investment tax credit benefits to California ratepayers – the more mature projects are much more likely to meet the deadlines and take advantage of this federal subsidy. Many of the utility-scale solar projects were designed, permitted and obtained the necessary rights to include storage as part of the facility.

Another reason to support a transitional opportunity for energy-only projects to compete for deliverability relates to the new proposed requirement that energy-only projects be OPDS in order to self-schedule. While we agree that existing energy-only projects should receive the opportunity to request OPDS, we are concerned that limiting the ability of the earlier-queued energy-only projects to self-schedule may further impair these projects' commercial viability, particularly since they don't have the same opportunity to compete for an allocation of "new" deliverability on equal footing with projects just receiving their Phase II study results. As identified in LSA's comments, there are still a number of questions related to off-peak deliverability status and off-peak network upgrades, including how these will work to provide value to energy-only projects. Without the more valuable component of full or partial deliverability, it isn't clear what value OPDS provides for the added cost to the developer.

We urge CAISO to establish a process that will provide a meaningful opportunity for energy-only projects to compete for deliverability. One option would be a very surgical change to the CAISO's allocation group three and Section 8.9.2.2 to remove the restrictions that limit that election to customers with a completed Phase II Interconnection study that have not parked. Doing this as a one-time transitional measure would leave the rest of the allocation groups and process intact. We also suggest that for this cycle CAISO allow projects subject to the restrictions of Section 8.9.2.2 to request a limited COD extension to no later than December 2024. This would allow projects to take full advantage of the ITC benefits, pass those along to ratepayers and would support the state's urgent capacity needs. Otherwise, the remaining limitations CAISO designed in its new provision 8.9.2.2 associated with proceeding without a power purchase agreement would still apply.



**2) Deliverable projects need more time to evaluate options before they lose existing levels of allocated deliverability**

Our second concern relates to the timing of the CAISO’s process to require projects with full or partial deliverability to make a determination about adding storage and allocating deliverability to the storage element. While we appreciate that CAISO is thinking about a transitional opportunity for projects with full or partial deliverability, asking developers to make these critical decisions to support a full modification request by December 2 is not reasonable.

Our projects currently negotiating PPAs would need to be examined before we could make decisions about how to navigate adding storage. Figuring out how to manage financing and PPA requirements associated with transfers of deliverability will take more time than CAISO has allowed.

In addition, the question of transfers and what portions of the project will count as fully deliverable also needs to be discussed. Because off-taker requirements for hybrid storage vary widely, it is difficult to pre-determine appropriate allocations prior to PPA execution. We believe that both the solar and the storage component should be fully deliverable if within the current allocation of deliverability to a project, without decreasing the deliverable output of the solar facility. There should be sufficient headroom under the new deliverability methodology to accommodate this.

With CAISO and the CPUC in the midst of considering how to address hybrid resources and setting an RA value for them, there’s insufficient clarity for developers about how these evolving rules will affect choices to add storage and evaluate their configuration, market participation, and related issues. Guessing about how rules that are still under development may affect serious commercial decisions is not something we should ask of the state’s renewable developers.

Projects with full and partial deliverability have counted on the MW allocation and taken the responsibility and risk with significant postings to maintain deliverable status. Removing a significant portion of the deliverability these projects have been allocated, after the significant investment and risk they have incurred to remain in good standing as a deliverable project, without allowing more time to evaluate the storage option, is not reasonable.

We suggest that CAISO consider a process by which interconnection customers would submit an affidavit this fall indicating the quantity of storage they anticipate adding to their facility to accept the deliverability transfer, and then require that the project provide the full details necessary for the CAISO to process the modification request within six to nine months at a size not to exceed the amount in the affidavit. This would allow CAISO to proceed with the studies in January and assume the amount of “reserved” deliverability from the affidavits that would be used for storage. This would also allow a much more reasonable timeframe for the project developer to develop plans to add storage, manage financial and commercial barriers and submit full modification requests to the CAISO. If the total amount of deliverability combined between the solar and the storage is less than the originally allocated



deliverability amount when evaluated under the new methodology, we also believe that both the solar and storage elements should both be considered fully deliverable.

We also suggest that CAISO consider a means for allocating costs of upgrades to the later-queued customers that will be receiving deliverability so the obligation for sharing the cost is equitably shared among those who benefit.

**3) The OPDS/OPNU proposal still poses a number of questions that should be resolved before taking the proposal to the CAISO Board**

First Solar agrees with the concerns and questions raised in LSA's comments. While we see the CAISO's proposed off-peak deliverability framework as a promising solution to the concerns we raised earlier in the year about the curtailment and congestion impacts associated with CAISO's revised methodology, we remain concerned about the number of implementation questions that need to be answered before the proposal is finalized.

**Conclusion**

First Solar remains supportive of the direction CAISO is headed with its revised methodology, and we appreciate the continued opportunity to offer feedback to the CAISO as it develops this new framework. However, we believe there are some significant issues that remain and look forward to participating in a process to cooperatively resolve them.

Respectfully submitted,

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