



**First Solar Comments on July 29, 2019 Deliverability Assessment Methodology Revisions
Straw Proposal
August 16, 2019**

First Solar provides these comments in response to CAISO's July 29, 2019 Deliverability Assessment Methodology Revisions Straw Proposal. We appreciate CAISO's responsiveness to stakeholders and the thought and creativity that went into the straw proposal. In particular, CAISO's recognition of the concerns about excessive curtailment risk is important. The proposal for the off-peak deliverability assessment with a new off-peak deliverability status and scheduling priority is a promising solution to the concerns we and others expressed about the change in on-peak deliverability methodology causing undue impacts on congestion and curtailment. First Solar believes that the fifth option presented in the Straw Proposal is the superior option for a number of reasons.

We agree with the CAISO that the on-peak deliverability assessment methodology should be deployed in tandem with the off-peak deliverability assessment methodology. If the two are bifurcated and the on-peak deliverability methodology implemented before the solution to the curtailment risk, First Solar is concerned about a potential mismatch in timing. We urge CAISO to evaluate the options available under its transmission planning and generation interconnection processes to perform the new on-peak deliverability assessment and remove upgrades not needed to meet peak sale hours while providing study results from the off-peak deliverability assessment so project developers can make those decisions and financial commitments at the same time.

A transitional process may be required to address the timing issues and existing queue clusters. First Solar supports maintaining the timeline suggested in the Straw Proposal. We believe it is important that implementation commence no later than the 2020 reassessment study. We support the use of potential tools, like a one-off transitional process, to achieve this timeline.

First Solar supports CAISO moving forward with the revised on-peak and off-peak deliverability assessment framework and the new off-peak deliverability status service with mandatory local off-peak transmission upgrades, with the following additions:

- 1) Further information about why the OPDS option provides the incentive for project developers to elect the option and fund the local upgrades.
- 2) A process for existing energy-only projects in the queue to receive the first opportunity to be allocated the incremental deliverability that results from the shift in on-peak methodology.
- 3) A process for existing energy-only projects to elect off-peak deliverability status, fund the off-peak local network upgrades and receive the market scheduling priority.



4) A plan to assess all projects with deliverability for impacts on local congestion rather than assuming that these projects have addressed excessive curtailment via upgrades designed to meet peak needs, before OPDS is allocated to these projects.

Revised On-Peak Deliverability Assessment Methodology

First Solar supports CAISO's on-peak deliverability assessment methodology. We agree that for purposes of planning the transmission grid to support reliability during the new peak sale hours, using data that represents the actual output of resources capable of supporting the grid during these hours is appropriate. For this reason, First Solar supports CAISO's decision to use summer assessment data at this time.

Energy-only projects:

Energy-only projects should be provided a one-time opportunity to seek deliverability under the new methodology before the additional deliverability is made available to new interconnection customers. We urge CAISO to develop a transitional process to allow energy-only projects to be studied and afford them the opportunity to obtain an allocation of the incremental increase in deliverability that may be available due to the revised methodology.

- CAISO knows how much deliverability was available for allocation during the last cycle, making it possible to establish a "base case" or set point to measure the incremental change in available deliverability. If the new methodology shows an incremental increase in availability, eligible energy-only projects should be given the first chance to compete for a TPD allocation according to queue cluster order. We suggest that projects that have already made their Phase II postings should be eligible for allocation of incremental deliverability.
- We have confidence given CAISO's experience designing transitional processes over time, as it has reformed its generation interconnection and transmission planning processes, that the team can design an effective process for this one-time transitional opportunity for energy-only projects. We also assume that the process could be run concurrently with the regular process for reviewing and allocating TP deliverability.
- This is an equitable way of managing the transition to the new deliverability methodology where, due to the shift in assumptions, additional deliverability may be available for allocation.
- Energy-only projects that are in good standing, have made financial commitments and investments to develop current projects and are further along towards achieving commercial operation to support state policy goal should have the opportunity to receive these allocations prior to the incremental deliverability being made available to new interconnection customers.
- This also benefits state policy goals because it allows projects that are much further along in their development and permitting process to be more competitive in new solicitations



where deliverability remains an important component of obtaining a power purchase agreement in California.

Proposed Off-Peak Deliverability Assessment & OPDS

First Solar supports the concept of the off-peak deliverability assessment. We are very intrigued by the new off-peak deliverability status proposal and think it could be a very innovative way to address local congestion risk and provide incentive to developers to fund the local upgrades to mitigate congestion and curtailment. We are already seeing curtailment associated with localized “crowding” of solar development. With the policy goals pushing additional renewable development in the state, we see this new framework as a promising way to address local congestion, improve the economic certainty for renewable project developers and support GHG reduction goals.

Additional data is needed to evaluate the OPDS solution

First Solar supports a framework that provides options rather than mandates. However, we do not feel that we have sufficient information today to evaluate the OPDS option and make an informed decision to conclude it will be effective. We are concerned that if it does not provide sufficient incentive the solution will not work to mitigate excessive congestion. We request that the CAISO provide additional data and examples illustrating the impact of scheduling priority on curtailment in the next version of the straw proposal so that stakeholders can evaluate the benefits of OPDS. If the incentive is not sufficient, it is possible that the off-peak local network upgrades should be mandatory to mitigate the impact on existing projects and to provide the infrastructure to support California’s GHG reduction goals.

Because there are a lot of stakeholder questions about the OPDS option, we urge CAISO to issue a revised straw proposal and allow stakeholders one more round of comments before presenting a final draft proposal. Doing this while maintaining the schedule to implement the new methodology (both on-peak and off-peak) by the 2020 reassessment timeframe is important. While we recognize this presents scheduling challenges, we urge CAISO to establish a process that allows for more vetting while maintaining the plan for summer 2020 implementation. If the timeline is too aggressive, we urge CAISO to consider an interim solution that would preserve the ability to move forward while maintaining the opportunity to mitigate for the curtailment and congestion risk.

Energy-only projects should be allowed the opportunity to elect OPDS

Current energy-only projects should be provided a one-time opportunity to elect OPDS. This could be done during a transitional process or coordinated with the fall affidavit cycle. Providing energy-only projects with the opportunity to fund the upgrades that will mitigate local curtailment and allow these projects to receive the scheduling priority along with new projects entering the queue is a reasonable way to provide balance and equity between older-queued customers and those just entering the queue. It also benefits California policy by reducing congestion and curtailment associated with growing numbers of energy-only projects.



Conclusion

First Solar appreciates the opportunity to engage with stakeholders, the CPUC and the CAISO in reforming the deliverability framework to address shifting grid dynamics. It is a challenging and exciting opportunity to design a planning and interconnection process that supports reliability and policy goals at the same time. Providing certainty via a framework that allows developers to finance projects and make sound risk assessments in making significant financial commitments is critical for the developing the fleet of renewable projects needed to support California policy goals. In addition, managing a shifting methodology while providing for an equitable way to address earlier-queued energy-only projects is an important element of the framework. We applaud the CAISO team's hard work, innovation and ingenuity, and we look forward to continuing to engage in this initiative.

Respectfully submitted,

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