

## Stakeholder Comments Template

Submitted by	Company	Date Submitted
Madeleine Aldridge Sr. Manager - Transmission & Interconnection 415-935-2485 madeleine.aldridge@firstsolar.com	First Solar, Inc.	February 7, 2018

Please use this template to provide your written comments on the 2018 IPE stakeholder initiative Issues Paper posted on January 17, 2018.

Submit comments to [InitiativeComments@CAISO.com](mailto:InitiativeComments@CAISO.com)

**Comments are due February 7, 2018 by 5:00pm**

The issue paper posted on January 17, 2018 and the presentation discussed during the January 24, 2017 stakeholder meeting can be found on the CAISO webpage at the following link: <http://www.caiso.com/informed/Pages/StakeholderProcesses/InterconnectionProcessEnhancements.aspx>

Please use this template to provide your written comments on the Issue Paper topics listed below and any additional comments you wish to provide. The numbering is based on the sections in the Issue Paper for convenience.

First Solar appreciates the opportunity to comment on the potential topics for inclusion in the 2018 Interconnection Process Enhancements initiative. Several significant issues related to deliverability, cost responsibility, and generator interconnection agreements have arisen since the CAISO last embarked on an iteration of the IPE and we are pleased to see the CAISO planning to address many of these issues in the 2018 IPE. First Solar offers the following comments on select topic areas that we believe should be priorities in this initiative. Though we believe most of the issues warrant evaluation and inclusion, including a number of items that are clarifying or “clean-up,” the following

comments highlight those with an especially pressing need.

In particular, the issues associated with deliverability transparency, forced conversion to energy-only, and the large forfeiture amounts required by the CAISO at withdrawal, particularly when projects withdraw due to lack of deliverability, are all interconnected issues that should be addressed together. Once a project is denied deliverability after its limited first year of parking, which is common due to the extended timeline necessary for marketing a project, the project is forced to withdraw or to convert to energy-only. Without deliverability, the value of the project drops significantly given the current procurement landscape where deliverability is valued due to the resource adequacy attribute. Where a project is given the choice to either accept energy-only status or withdraw, withdrawal under this circumstance makes the forfeiture punitive and also discourages projects that might otherwise leave the queue at this point from doing so. The issues around deliverability are compounded because of the lack of visibility that an interconnection customer currently has into available deliverability at interconnection locations throughout the CAISO grid. With better information interconnection customers could make more informed choices and the CAISO and interconnecting utilities would likely have reduced workloads as a result.

## 4. Deliverability

First Solar believes the most serious needs for IPE are related to deliverability and we support the CAISO in taking on these key issues. Deliverability is critical for marketing a project, as energy-only projects currently are less appealing due to their lack of resource adequacy attribute and are therefore less competitive in procurement. We ask the CAISO to address several issues that prevent interconnection customers from being allocated or retaining deliverability, as well as issues that have impacts on others in the queue.

### 4.1 Transmission Plan Deliverability Allocation

First Solar appreciates the CAISO committing to addressing a long-term solution to parking timing. While the Expedited GIDAP Enhancement initiative provided some temporary relief to projects in the current procurement landscape, a more thorough evaluation is necessary. First Solar supports working towards better alignment of the interconnection and procurement timelines to optimize the time in the queue. Projects need more than an additional year where they remain eligible for deliverability following receipt of their Phase II study results to effectively market projects. Other changes could include moving the timeline for the opportunity to park to the year after the Phase II

study results are issued, not at the issuance or prior to the issuance of the Phase II report as happens how.

First Solar believes that CAISO needs to examine this process, especially in light of the lack of clear direction on whether the future procurement of renewables will continue to require FCDS. Energy-only projects are not attractive to buyers and the CAISO should work to protect the ability of developers to realize their expected time in queue rather than preemptively forcing a withdrawal from the queue due to forced conversion to energy-only for circumstances outside the developer's control. Keeping the status quo due to uncertainty will hurt ratepayers in the future as LSEs have fewer projects competing in future RFOs.

#### 4.2 Balance Sheet Financing

First Solar continues to believe that the CAISO should reevaluate the affidavit process for deliverability to ensure appropriate rankings. Under the current framework, if there is not enough TP deliverability to be allocated to all eligible products, projects that select balance-sheet financing are ranked above those with a PPA or that are short-listed. It is likely that balance-sheet financing is only being used as a path to holding a queue position longer, as generators of all types still require an off-taker for their energy and merchant development is very rare. The ranking system should be revised and a regulatory-approved PPA should be the highest ranking, as its most financeable and the surest indication of a project's ability to achieve commercial operation.

First Solar also supports the creation of more rigorous criteria for balance-sheet financing that allows for validation and enforcement for those selecting this option. As part of the implementation of the new criteria, there should be a re-examination of all projects who have selected this option to ensure consequences for those projects who may be selecting this option simply to evade the demonstration required for meaningful commercial viability.

#### 4.3 Participating in the Annual Full Capacity Deliverability Option

First Solar supports the CAISO's decision to include this in the scope of the 2018 IPE.

#### 4.4 Change in Deliverability Status to Energy Only

First Solar supports adding additional times for generators to change to energy-only. We believe interconnection customers should have more flexibility to make the best business decisions for

their projects. Given the challenges of procurement, we support the ability of generators to be relieved of the responsibilities related to DNUs when necessary, should conversion to energy-only be the best option for the project.

#### 4.5 Energy Only Projects' Ability to Re-enter the CAISO Queue for Full Capacity

First Solar believes that energy-only projects should be allowed an annual opportunity to compete for an allocation of deliverability, regardless of how far along the project is. These projects should be considered for allocation on the same footing as other projects seeking deliverability in the same allocation cycle.

#### 4.6 Options to Transfer Deliverability

First Solar supports including this clarifying topic in the scope of the initiative and also asks the CAISO to open the discussion to additional opportunities to transfer deliverability.

#### 4.7 Transparency on Availability of Deliverability

First Solar appreciates the CAISO considering the creation of a new mechanism to provide greater accessibility to deliverability information. Transparency in the availability of deliverability will allow interconnection customers to make better decisions about siting projects and reduce the number of forced conversions to energy-only in places where there is limited deliverability available. We suggest that deliverability be defined by area, similar to CREZ, and be re-assessed when a queue position obtains an off-taker and meets commercial viability criteria.

#### 4.8 Commercial Viability Criteria – Continuous Compliance Obligation

#### 4.9 Interim Deliverability Status

#### 4.10 Effective Load Carrying Capacity

First Solar supports the CAISO's decision to take this issue up in its own track and looks forward to participating in the 2018-2019 transmission planning cycle.

#### 4.11 Cancellation or Delay of CAISO Approved Transmission Projects

First Solar supports LSA’s position on this topic and looks forward to the conclusion of the BPM PRR 1027, which the CAISO indicated at the last BPM Change Management PRR meeting will continue with an off-line discussion with LSA and the CAISO.

### 5. Energy Storage

#### 5.1 Distributed Energy Resources

#### 5.2 Replacing Entire Existing Generator Facilities with Storage

First Solar urges the CAISO to reconsider including this topic but broaden it to cover a more thorough discussion of what is possible for generators seeking to convert some portion of their project to storage. We ask the CAISO to promote more flexibility in the ability for generators to convert portions of their project to storage, and to consider a larger discussion of these possibilities as part of the IPE.

#### 5.3 Deliverability Assessment for Energy Storage Facilities

### 6. Generator Interconnection Agreements

#### 6.1 Suspension Notice

#### 6.2 Affected Participating Transmission Owner

#### 6.3 Clarify New Resource Interconnection Requirements

#### 6.4 Ride-through Requirements for Inverter based Generation

#### 6.5 Affected System Options

For cluster study projects, First Solar believes that the CAISO should work with the affected systems regarding their study assumptions. Existing processes are not sufficient as individual developers must negotiate their own queue position impacts. As single entities, these developers do not have much negotiating power, resulting in a power imbalance. Including the CAISO in negotiations and outreach to affected systems will level the playing field and also allow multiple developers who may be contributing to the same impact to negotiate with the affected system together. The CAISO should not

be simply the back-stop but should be a key player in the initial discussions. The grid is tied together as a larger system, and outages on any system have the potential to affect others. We thus ask for more coordination from the CAISO with affected systems. Further, First Solar also supports the implementation of an option for the CAISO to allow interconnection when an affected system is being unreasonable.

## 6.6 Modeling Data Requirements

# 7. Interconnection Financial Security and Cost Responsibility

## 7.1 Maximum Cost Responsibility for NUs and Potential NUs

## 7.2 ITCC for Non-cash Reimbursement Network Upgrade Costs

## 7.3 Financial Security Postings and Non-Refundable Amounts

First Solar continues to believe that the CAISO needs to reevaluate project forfeiture amounts. With excessively high forfeiture amounts, non-viable projects have an incentive to stay in the queue, when instead the CAISO should be making it easier to exit the queue and less burdensome on the development of generation projects. As things stand now, the forfeiture levels discourage projects that should back out of the queue from doing so, having the opposite effect of the queue clearing incentives desired by the CAISO. First Solar suggests that the amounts should not exceed the costs to do a new study, or \$150,000. These funds could be used to fund the yearly reassessment and restudies that take place and are affected by withdrawals.

Additionally, these forfeiture amounts are especially burdensome in light of the lack of information on the availability of deliverability that can result in a forced withdrawal from the queue if the interconnection customer chooses a point of interconnection with limited or no deliverability available. When a project is not allocated deliverability and is forced to convert to energy-only, withdrawing may be a better choice. First Solar believes that generators would be more likely to withdraw if the CAISO adjusted the penalty so that when a project is informed it will not be allocated deliverability it was not required to face significant forfeitures upon withdrawal. The CAISO would be more likely to achieve the goal of reducing the number of projects in the queue if it adjusted forfeiture amounts under these circumstances.

Another reason First Solar supports a reevaluation of the forfeiture amounts is the way that

planning for upgrades is done. Due to the inclusion of Potential Network Upgrades, the cost estimate far exceeds the expected actual cost of construction because many of these upgrades are not actually needed. This results in unreasonably high security postings, especially at Phase I. Now with QC10 there is a new category of these potential network upgrades that, although a project does not initially have to make a financial posting, leaves a question of what the future posting would be, leading to uncertainty in financing of projects. These render the postings and the associated forfeiture at withdrawal more arbitrary.

#### 7.4 Queue Clearing Measures

First Solar supports the implementation of additional queue clearing measures, including the one-time “holiday” from forfeitures suggested by LSA. This would be especially beneficial to projects without executed GIAs that may be less inclined to withdraw at this earlier point due to the high forfeiture amounts, though it otherwise would be the best decision. These issues tie in closely with First Solar’s discussion of forfeiture issues described above.

- 7.5 Shared SANU and SANU Posting Criteria Issues
- 7.6 Clarification on Posting Requirements for PTOs
- 7.7 Reliability Network Upgrade Reimbursement Cap
- 7.8 Reimbursement for Network Upgrades

### 8. Interconnection Request

- 8.1 Study Agreement
- 8.2 Revisions to Queue Entry Requirements
- 8.3 Master Planned Projects (Open Ended and Serial Projects)
- 8.4 Project Name Publication
- 8.5 Interconnection Request Application Enhancements
- 8.6 FERC Order No. 877

### 9. Modifications

9.1 Timing of Technology Changes

9.2 Commercial Viability – PPA Path Clarification

First Solar supports this clarification, and agrees that it may be dependent on the outcome of other topic areas in this initiative.

9.3 PPA Transparency

9.4 Increase Repowering and Serial Re-Study Deposit

9.5 Clarify Measure for Modifications After COD

9.6 Short Circuit Duty Contribution Criteria for Repower Projects

9.7 Material Modification for Parked Projects

**10. Additional Comments**