

### **Stakeholder Comments Template**

# Subject: Generation Interconnection Procedures Phase 2 ("GIP 2")

Submitted by	Company	Date Submitted
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First Solar has been extensively involved with the development of comments for the Large Scale Solar Association. We fully support the LSA comments and provide these comments as a supplement.

#### Comments on topics listed in GIP 2 Straw Proposal:

#### **Work Group 1**

1. Develop procedures and tariff provisions for cost assessment provisions.

#### Comments:

Due to the large number of Interconnection Applications, the GIP is moving on a transmission planning trajectory that is losing connection to market realities. The reality is that until renewable energy achieves wholesale cost parity with conventional resources, the total renewable power development including imports will track the RPS requirement (with some margin). This demand driven development is the assumption used in the TPP. First Solar supports the use of demand based transmission plan provided that the plan accommodates sufficient margin to facilitate competition and is flexible to track the generation projects that are successful in obtaining procurement contracts.

We are seeing a growing chasm between the GIP and TPP transmission plan that is not sustainable, from both the manpower needed to maintain two sets of plans as well as the market signals being sent to new entrants. The CAISO's proposal would penalize



new entrants to the point that they are economically non-viable due to high transmission costs from the GIP while transmission capacity from ratepayer funded policy driven upgrades is allocated to the early entrants on a first-come, first-served basis without consideration of the ratepayer value of the resource. In this sense, the GIP transmission capacity allocation process is picking the winners and losers in the LSE procurement programs. The CAISO and stakeholders need to work together on GIP reform that complements the markets (primarily the LSE procurement processes) rather than confound them by having a GIP that limits the access to those markets as well as forces unnecessarily high financial risks on a segment of market participants.

Converging the GIP and TPP at the GIP Phase 2 study would align the plans, but it also important how the alignment is made within the TPP. This will take substantial work group effort as there are likely many different visions how to bring these two processes together.

As a straw man, one option would be a modification of the FERC Order 888 process in the development of the transmission plan for Delivery Network Upgrades (DNUs). Under Order 888, the need for DNUs is triggered by a LSE designation of a generator as a Network Resource (NR). There are several ways that such a process could be structured within the CAISO GIP. For example, a process may be:

- a. GIP application and process up through the Phase 1 study and first security posting – no change.
- b. Following the security posting associated with the final Phase 1 Study Report, within one year one of the following three alternatives must occur:
  - i. A LSE would designate the IC as a network resource (NR). Such NRs would then be included in the then open TPP process and the associated DNUs would be included in the resultant draft TPP. Conceptually this would encourage the LSEs to select projects that utilize the TPP DNU, but also allow the LSE to designate generation projects outside the CREZs served by the TPP renewable transmission plan as NRs if their Phase I study results were favorable.
  - ii. The IC elects to either become a EO resource or fund any DNUs. These participant-funded DNUs could be an allocation of a portion of the capacity and cost an otherwise utility funded upgrade. The concept here is to provide a path in the event there are merchant generation projects that wish to move forward, but not have not have such projects tie up utility up front funded transmission capacity. Participant-funded DNUs would be eligible for reimbursement following the IC COD as per the current process.
  - iii. If neither (i) or (ii) occur, the IC would be removed from the interconnection queue with its security released. Any Interconnection Application deposit would be refunded as per current tariff rules. The one time option to fully recover the project security is to encourage projects to exit the queue prior to the GIA negotiation if they are not ready to move forward.

<sup>&</sup>lt;sup>1</sup> LSEs would use the information from the Phase I studies as well as the current CAISO TPP in designing their RPS bid evaluation protocol and ICs that are successful in negotiating a Power Purchase Agreement would be designated as a NR.

<sup>&</sup>lt;sup>2</sup> If so, the timing of such multiple use upgrades would be driven by the need for capacity identified in the TPP.



c. An IC remaining in the queue following the above would move to the GIA negotiation and execution stage. The security step-up, funding for Reliability Upgrades, Network Upgrade cost reimbursement, etc, would follow the current LGIP process.

As most current PPAs have the LSE taking ownership of the project power at the POI (or first CAISO bus), the LSE bears the responsibility of moving the power to load as well as receives the RA benefits. Therefore the decision of the value of the DNU assigned to a Network Resource best lies with the LSE. If the DNU cost exceeds the LSE's value of the RA credit and congestion mitigation, the LSE could choose to undesignate the IC as a Network Resource following the issuance of the draft TPP. The final TPP would be adjusted to reflect any such change in designation. (Note the implementation of this aspect of the plan requires coordination with the CPUC on the form of PPA contracts to ensure full PPA payment and PTC gross up for wind in the event of congestion based curtailment.)

The decision to forego the NR designation would not be a one-time decision. The LSE may choose to re-designate a generation project as a NR in a future TPP cycle. The LSE may also designate a generator as a NR that had proceeded through the GIP as an EO project and later secured a PPA with the LSE.

#### **Transitional Issues**

The transitional issues must be accommodated, but not allowed to drive the ultimate end state. Many IC have proceeded through the GIP and a proposal would need to accommodate their position. For example, those projects that have reach certain milestones (LGIA, Second Security Posting or some other measurable milestone) and have been identified as being Fully Deliverable would maintain that status. To the extent that such legacy resources have received a Fully Deliverable status, but are not moving ahead with development, incentives would be provided to encourage the utilization of ratepayer funded capacity.<sup>3</sup>

Clarify Interconnection Customer (IC) cost and credit requirements when GIP network upgrades are modified in the transmission planning process (per the new RTPP provisions)

Comments:

#### Work Group 2

3. Participating Transmission Owner (PTO) transmission cost estimation procedures and per-unit upgrade cost estimates;

Comments:

<sup>&</sup>lt;sup>3</sup> This could be in the form of greater flexibility in changing their technology or transferring their queue position to allow for greater market opportunities to clear the queue. However this would not replace any administrative options that are available to the CAISO to address ICs that are not moving forward.



4. Generators interconnecting to non-PTO facilities that reside inside the ISO Balancing Area Authority (BAA);

Comments:

5. Triggers that establish the deadlines for IC financial security postings.

#### Comments:

We suggested a clarification to the straw proposal language as follows:

Asserted errors or omissions which are not acknowledged by either CAISO or the PTO concerning cannot serve as the basis for a delay in the financial security posting date.

6. Clarify definitions of start of construction and other transmission construction phases, and specify posting requirements at each milestone.

Comments:

7. Improve process for interconnection customers to be notified of their required amounts for IFS posting

Comments:

8. Information provided by the ISO (Internet Postings)

Comments:

#### Work Group 3

9. Develop pro forma partial termination provisions to allow an IC to structure its generation project in a sequence of phases.

#### Comments:

This issue has significant implications on the state's ability to meet its RPS targets. To take a position on this Issue, it is critical to understand how Issue 1 unfolds. The fundamental underlying question is whether ratepayer transmission capacity is going to be used & useful in support of the state's RPS requirements. Will capacity continue to be allocated on a first come first serve basis or will capacity go to those projects that are moving forward? Fundamentally, we support allocation of capacity to those projects that moving forward, but balanced with sufficient certainty to support project financing.

First Solar supports a process that encourages developers to submit Interconnection Applications that reflect the proposed development of the project. If it becomes necessary to phase the construction of a project due to transmission system limitations, then accommodations would seem appropriate, However any such accommodations



should not result in an advantage over a developer that had selected to submit multiple Interconnection Applications for a single project that reflect its anticipated phases. We are especially concerned that any such phasing provisions that allows projects to hold capacity without advancing toward final permitting and construction is moving in the wrong direction. At a minimum, there should be independent progress requirements for each phase of the project.

Notwithstanding the above concerns, below are a few additional comments on the specifics of the straw proposal.

#### Method for calculating the amount of the option payment

#### Risk of Alternate Project Completion.

The methodology for calculating the cost of the option payments should better reflect the importance of timing in generation project development and should reflect the timing risk that alternate projects may not come online.

For background information, the Federal incentive tax credit (ITC) for solar energy development will expire at the end of 2016. Without the ITC, solar project economics has a greater challenge. Let us consider a scenario: At the time of signing a GIA, "Project A" is tying up the transmission capacity for an extended period. The fact that the developer is seeking the partial termination option highlights development uncertainty. For a project in a later cluster, without confidence of obtaining transmission capacity, it is much more difficult, if not impossible to obtain the needed PPA and finance the construction until Project A relinquishes the capacity. Therefore the "option" value should reflect the lost economic opportunity that occurs by leaving transmission capacity fallow while the IC works to mature the later phases of their project.

#### Triggering MW.

Prior to the WG 3 meeting, can CAISO provide an example that explains the "triggering MW" and the "generation in the queue" used to calculate the multiplier?

These notes are an attempt to clarify these terms.

999 MW – existing unused transmission capacity

4000 MW – generation in the cluster

800 MW – generation seeking option

5000 MW – capacity identified to accommodate the generation

Would CAISO's proposal calculate the Multiplier as follows: 1000 MW trigger / 3200 MW generation in queue? If so, are expensive 500 kV transmission upgrades likely to be constructed for just 1 MW of generation? Perhaps the triggering multiplier should require that the queue fill some portion of the new capacity, before the triggering MW is reached. For example, if that portion were 50%, the triggering MW would be: 1000 MW  $\pm$  50%  $\pm$  5000 MW  $\pm$  3500 MW.



- 10. Reduction in project size for permitting or other extenuating circumstances Comments:
- 11. Repayment of IC funding of network upgrades associated with a phased generation facility.

Comments:

12. Clarify site exclusivity requirements for projects located on federal lands.

Comments:

- 13. Interconnection Refinements to Accommodate QF conversions, Repowering, Behind the meter expansion, Deliverability at the Distribution Level and Fast Track and ISP improvements
  - a. Fast Track application to facility repowerings
  - b. QF Conversion
  - c. Behind the meter expansion

Comments:

d. Distribution level deliverability

Comments:

#### **Work Group 4**

14. Financial security posting requirements where the PTO elects to upfront fund network upgrades.

#### Comments:

First Solar supports the CAISO straw proposal along with the posting requirements. It is important to consider how performance milestones, and development progress, can be monitored for projects where the PTO has elected to upfront fund and have granted relief of financial security. Methods for ensuring milestone compliance are important and should be addressed upfront within a Business Practice Manual.

15. Revise ISO insurance requirements (downward) in the pro forma Large Generation Interconnection Agreement (LGIA) to better reflect ISO's role in and potential impacts on the three-party LGIA.

## California ISO Shaping a Renewed Future

#### Comments Template for April 14, 2011 Straw Proposal

#### Comments:

Straw Proposal section 5.4.2

As we had discussed in the WG4 call, First Solar in discussions with insurance carriers, notice provisions, as language in the LGIA provisions, are not generally a commercially available product. Therefore there should be flexibility, and we can leave the provision with the caveat "to the extent available". See added/modified language below in 18.3.5

**18.3.5** The Commercial General Liability Insurance, Business Automobile Insurance and Excess Public Liability Insurance policies shall name the other Parties, their parents, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group and to the extent available from the applicable insurer provide thirty (30) Calendar Days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.

In addition First Solar, along with other stakeholders, agrees that proof of insurance should only be provided for when the development milestones require it. This is similar to the comments made by Wellhead. In other words, construction related insurance should only be required when construction activities have initiated and operation type insurance should only be required after synchronization of the facility. Right now the required milestone is at the effective date of the LGIA which may be years prior to construction and operation. We would be interested in working with the CAISO and the PTOs to better align the required need and timing of insurance.

16. Standardize the use of adjusted versus non-adjusted dollar amounts in LGIAs.

#### Comments:

First Solar supports CalWEA and LSA comments and do not object to the Straw Proposal.

17. Clarify the Interconnection Customers financial responsibility cap and maximum cost responsibility

#### Comments:

The ISO straw proposal seeks to clarify that the "max cost responsibility is the lower of Phase 1 or Phase 2 estimates", and will clarify language in 6.7, 7.1 and section 9. It is First Solar's position, in agreement with the CAISO's position, that the maximum cost responsibility is the lower of the Phase 1 or the Phase 2 estimates, and that the confusion stems from how the provisions relating to those costs and responsibility are



outlined in the tariff. We agree and fully support the CAISO's correction of the tariff and providing clarifying language.

18. Consider adding a "posting cap" to the PTO's Interconnection Facilities Comments:

We support comments submitted by CalWEA and LSA.

#### **Work Group 5**

- 19. Partial deliverability as an interconnection deliverability status option.

  Comments:
- 20. Conform technical requirements for small and large generators to a single standard Comments:
- 21. Revisit tariff requirement for off-peak deliverability assessment.

  <u>Comments:</u>
- 22. Annual updating of ISO's advisory course on partial deliverability assessment Comments:
- 23. CPUC Renewable Auction Mechanism requirement for projects to be in an interconnection queue to qualify Comments:

#### **Other Comments:**

- 1. Provide comments on proposals submitted by stakeholders.
- 2. If you have other comments, please provide them here.