

**COMMENTS OF THE LARGE-SCALE SOLAR ASSOCIATION  
ON THE CAISO DRAFT FINAL PROPOSAL  
FOR GENERATOR INTERCONNECTION PROCESS REFORM**

The Large-scale Solar Association (LSA) submits the comments below to the CAISO’s July 20<sup>th</sup> **“Generator Interconnection Procedures – Draft Final Proposal”** (“Proposal”), and the July 27<sup>th</sup> stakeholder meeting to discuss it. The Proposal contains the CAISO’s latest proposal to revise the Small Generation Interconnection Process (SGIP) process, and combine it with the Large Generator Interconnection Process (LGIP) to form one Generator Interconnection Process (GIP).

Our comments are summarized below and explained further in the remainder of this document.

TOPIC AREA	LSA POSITION
<b>Study Deposits</b>	Adopt CAISO proposal, for both small and large projects
<b>“Fast Track” qualification</b>	Raise current 2 MW limit to 5 MW
<b>Independent Study Process (ISP)</b>	Adopt earlier-proposed LSA/CalWEA “safety net,” to avoid interference with cluster studies
<b>Second Cluster Study Track Window</b>	Do not implement unless added projects are responsible for upgrades they trigger and that determination will not delay cluster studies
<b>Second IFS Posting cap</b>	Adopt CAISO cap concept but set cap at \$7-10 million
<b>100% posting requirement clarification</b>	Clarify that 100% posting level is due for each major discrete upgrade when construction starts for that upgrade, not all at once at start of the first
<b>TPP-related issues</b>	Clarify that TPP “rightsizing” of LGIP upgrades won’t increase IFS obligations
	Give developer option to execute LGIA soon after Phase 2, s.t. change after TPP review
<b>Future Deliverability Assessments</b>	Allow WDAT & other projects with no Deliverability Assessment option in their interconnection processes to enter the CAISO queue for that sole purpose

**Study Deposits:** The Proposal would replace the current flat SGIP and two-tier LGIP Study Deposit structure - \$250K for projects over 20 MW and \$100K for smaller projects – with a new structure featuring a \$50K base fee plus \$1K per MW of new or added capacity. This would result in a lower Study Deposit for projects in the 0-200 MW range than under the current LGIP.

LSA supports the Proposal, which is very similar to the “sliding scale” structure recommended by the joint LSA/CalWEA comments on the Straw Proposal. As noted in our comments, this type of structure would:

- **Incent project “right-sizing.”** The current structures encourage developers to propose projects that are larger than they really plan to build, instead of an optimal size given the site and other factors, especially because projects can reduce their size after the IR is submitted (and they see their study results) but cannot increase it.
- **Provide a smoother transition between fees for similar project sizes.** Under the current LGIP structure, a 20 MW project would pay \$100K, but a 25 MW project (25% larger) would pay \$250K (250% larger). The Proposal would avoid these disproportionate changes.

**“Fast Track” qualification:** LSA supports increasing the qualification limit for Fast Track treatment from 2 MW to 5 MW, especially if the “electrical independence” criterion is retained for the Independent Study Process (ISP). That criterion, which is not related to project readiness to proceed, will likely greatly restrict the number of projects qualify for ISP status.

The CAISO may have relatively few projects that would qualify under either criterion, as discussed in the stakeholder meetings. However, the higher limit will send an important signal to PTOs as they consider revisions to their WDATs, and perhaps encourage the CAISO and PTOs to make further revisions to streamline the Fast Track process.

**Independent Study Process (ISP):** The Proposal would allow projects that can demonstrate electrical independence from higher-queued projects and other readiness metrics to be studied individually, on a faster schedule, instead of participating in the regular cluster-study process. While the criteria appear to be difficult to meet, LSA is concerned that a large number of individual-study projects could undermine the regular cluster-study process.

Thus, regardless of the criteria the CAISO adopts for the ISP, it should incorporate the proposal from the earlier LSA/CalWEA comments to provide for CAISO suspension of the ISP, and formation of a prompt stakeholder process to consider revisions, if the number of ISP applications for any PTO is large enough to impede the cluster-study process.

**Second Cluster Study Track Window:** The Proposal would allow small ( $\leq 20$  MW) Energy-Only projects to skip the Phase I Study and jump into a Phase II Study cluster, if they demonstrate that this is needed to meet their CODs and post twice the minimum Interconnection Financial Security (IFS) amount. This proposal is intended to provide a second window for small projects to enter the interconnection process, to accommodate their generally faster development timelines.

However, allowing small Energy-Only projects to jump into the interconnection process just for the Phase II Study would be unfair under the conditions in the Proposal, because:

- ***The financial-security posting (2x minimum) could be much less than others in the same cluster;***
- ***The additional capacity could trigger additional Reliability Upgrades for the cluster,*** i.e., costs that might otherwise decline for Phase II without the additional capacity; and
- ***The additional capacity could trigger additional Distribution Upgrades,*** where the new and at least one other project in the cluster are connected at distribution voltage. This would be particularly unfortunate for any affected distribution-level projects, because there is no Phase I cost cap for Distribution Upgrade costs.

This proposal would only be fair if the costs of any transmission or distribution upgrades triggered by the additional capacity were allocated only to that capacity (similar to the earlier treatment of Transition Cluster projects changing from Energy-Only to Full Capacity status), and not shared with other projects in the cluster. However, that would require the CAISO/PTOs to perform Reliability Assessments with and without the additional capacity - i.e., 2 studies instead of 1 - and that could impair their ability to meet the study timelines.

Thus, this proposal would only be acceptable if:

- ***The financial-security posting amount was proportional to the level posted by the other projects in the cluster;***
- ***The added projects would assume full responsibility for any transmission distribution upgrades that would not be needed without them;*** and
- ***The PTOs are confident that the required project-in/project-out studies to determine the additional upgrades from the added projects would not delay the cluster-study timelines.***

**Second IFS Posting cap:** The Proposal would retain the current posting requirement – that developers post IFS equal to 30% of the lower of Phase I or Phase II Study Network Upgrade cost estimates, by 180 days after the Phase II Study release – but cap this posting amount at \$25 million.

This proposal would only mitigate posting amounts for projects with more than about \$75 million. However, the cost of carrying as much as \$25 million of security for several years could drive otherwise-viable generation projects out of the queue.

That cost far exceeds the 2-3% level quoted by one participant commented one of the working-group conference calls. LSA members include experienced developers with strong track records, and we have found that actual annual costs of placing an LOC can be significantly higher – in some cases, well beyond 15% annually (for confidentiality reasons this figure is not disclosed).

Large utilities (e.g., SCE) have very large operations and significant regulatory protections that both improve their access to credit and lower the cost of that credit. (This is one reason why PTO financing of Network Upgrades will likely lower costs to ratepayers.) However, even experienced developers do not have the same access to credit as a large utility, and their cost of credit can be significantly higher.

While the cost of placing an LOC may be 2-3%, this is simply an *administrative* charge and not the full cost of credit in today's financial markets. An LOC is generally secured with cash (or equity from investors) at a very high additional cost. This cost, which includes market interest rates and the opportunity cost of equity, can be above 15% annually, depending on developer size and experience, imposing a significant cost burden to carry LOCs for many years before upgrade construction.

Considering the true LOC carrying costs, the CAISO should cap the Second IFS Posting in the \$7-10 million range. This is more than sufficient to demonstrate project seriousness and viability.

**Releasability of Second IFS Posting:** As discussed at the July 27<sup>th</sup> meeting, depending on the relative magnitude of Phase I and Phase II Study cost estimates for Network Upgrades, the current LGIP rules may incent generation projects that should drop out of the queue to remain in.

The Second IFS Posting amount is currently set at 30% of the lower of the Phase I or Phase II Study cost estimate. It is due 180 days after issuance of the Phase II Study.

The financial-security release provisions in LGIP Section 9.4 would require forfeiture by the developer of:

- The lower of 50% of the first posting amount or \$10K/MW, if the project withdraws before 6 months past the Phase II Study issuance; and
- The lower of 50% of the second posting amount or \$20K/MW, if the project withdraws between 6 months past the Phase II Study issuance but before Network Upgrade construction begins.

*(The entire IFS would be forfeited if the withdrawal was for a reason other than: (1) failure to secure a PPA or a required permit; (2) Interconnection Facilities (IF) cost increase of the greater of 30% or \$300K in the Phase II Study; or (3) IF change due to CAISO-mandated POI change in Phase II Study or TPP.)*

Consider a situation where the Phase II Network Upgrade costs are lower than Phase I costs (e.g., due to project dropouts in a cluster), and where the 50% criterion applied for both. The developer would actually forfeit less by waiting until the second posting was due, posting the lower IFS, and then withdrawing than it would by just withdrawing right after the Phase II Study.

Thus, LSA recommends a change to the IFS provisions for the period between release of the Phase II Study and the due date of the Second IFS posting, as shown below. (The proposed revisions to the current process are shown in red font.)

<b>IFS POSTING</b>	<b>NU POSTING AMOUNT</b>	<b>TIMEFRAME</b>	<b>IFS FORFEIT</b>
<b>Initial</b>	Lower of: (1) 15% of Phase 1 costs; (2) \$20K/MW; or (3) \$7.5M/project.	Initial IFS Posting until Phase 2 Study issued	Lower of 50% of Initial IFS Posting or \$10K per MW*
<b>New</b>	Lower of: (1) 15% of the lower of Phase 1 & Phase 2 costs; (2) \$20K/MW; or (3) \$7.5M/project.	Phase 2 Study issued until Phase 2 Study issued + 6 mos.	Lower of 50% of New IFS Posting or \$10K per MW*
<b>Second</b>	Lower of: (1) 30% of the lower of Phase 1 & Phase 2 costs; or (2) new \$7-10M/project cap	Phase 2 Study issued + 6 mos. until construction commencement	Lower of 50% of Second IFS Posting or \$20K per MW, until construction begins
<b>Third</b>	30% of the lower of Phase 1 & Phase 2 costs	After construction commencement (regardless of time since Phase 2)	100% (\$500K minimum forfeit)

\* This amount applies until construction start for withdrawals due to IC failure to secure a “necessary permit.”

**100% posting requirement clarification:** The current LGIP provides that IFS must be increased to 100% of estimated Network Upgrade costs by “start of construction” for the Network Upgrades or PTO Interconnection Facilities. The CAISO has appeared to agree verbally that the “100%” posting should be due in phases as each major upgrade begins construction, and not due in full when the first upgrade is begun. However, this clarification has yet to appear in CAISO written proposals. The CAISO should provide this clarification and stop side-stepping the issue.

**TPP-related issues:** Two issues have been raised during the stakeholder process that should lead the CAISO to file additional tariff modifications, described below, in this process related to the interaction of the LGIP with the annual Transmission Planning Process (TPP).

- **Developer financial-security impact:** The CAISO has proposed through the Transmission Planning Process (TPP) that large and costly transmission upgrades identified in the LGIP be reviewed in the TPP for possible “right-sizing,” i.e., upgraded to address other current or future system needs. The CAISO has clarified verbally through this GIP Reform process that any such TPP changes would not increase the developer’s financial-security obligations; it should make that confirmation formal through incorporation in the LGIP tariff language.
- **LGIA execution option:** As discussed in this stakeholder process, review of significant transmission upgrades in the TPP could delay LGIA execution by 6 or more months for generation projects in affected clusters. During the July 27<sup>th</sup> meeting, CalWEA proposed that developers of projects in such clusters have the option to execute LGIAs with the upgrades, schedule, and cost estimates from the Phase II Study, subject to revisions after the TPP review, if that would help them in financing and developing their projects.

We are not sure at this point whether this will be a viable course of action. However, it seems reasonable to add it as a developer option, and the CAISO should do so.

**Future Deliverability Assessments:** As noted in the stakeholder meetings, all the PTOs or others (e.g., municipal utilities) may not alter their WDATs to follow the new GIP reforms, or they may not do so right away. Thus, in addition to the proposed one-time Cluster #4 Deliverability Assessment option for existing Energy-Only plants, the CAISO should allow any generating plants in the CAISO area that do not have a Full Capacity option in their regular interconnection process to enter the CAISO queue in the future, just for purposes of obtaining a Deliverability Assessment.