

## COMMENTS OF THE LARGE SOLAR ASSOCIATION ON PROPOSED CHANGES TO THE LARGE GENERATOR INTERCONNECTION PROCESS

The Large Solar Association (LSA) appreciates the opportunity to offer these comments on CAISO-proposed changes to the Large Generator Interconnection Process (LGIP). LSA is the trade association representing utility-scale solar developers in California and elsewhere.<sup>1</sup> Many LSA members have projects with interconnection requests in the transition cluster that would be affected by the CAISO's proposed changes. Absent immediate reform of the LGIP, these projects (and the state renewable and greenhouse gas policies that depend upon them) are fundamentally imperiled by prohibitive interconnection costs. These costs result from Phase 1 estimates of reliability and deliverability upgrades that far exceed the expectations of LSA or other parties when the current interconnection process was developed and approved. These upgrades exceed anything currently in the transmission planning process or any realistic estimate of the transmission necessary or capable of being permitted, financed and built in California over the next decade. In light of these exorbitant and unrealistic upgrade estimates, the need for reform of the LGIP is beyond dispute.

LSA applauds the CAISO's quick action to attempt to mitigate the impacts of these striking results through the proposed LGIP revisions, and we offer support for several of those proposals, as well as comments and suggested improvements to these concepts. Time is of the essence.

Following our discussion of the CAISO's immediate "quick fix" proposals, our comments discuss ways to address the root cause of the high upgrade estimates. To address the causes, additional actions are warranted, i.e.:

- A more comprehensive review of the CAISO and PTO study methodology; and
- A review of the overall schedule of the interconnection process.

We recognize that these issues cannot be resolved in the timeframe of this immediate process. LSA supports this effort and does not seek to delay it. But we bring these larger issues to the CAISO's attention in the hope that it will address them promptly following this proceeding.

### Changes to the Initial IFS Posting

LSA urges the CAISO to make the following amendments and clarifications to the initial IFS posting requirements:

- **Cap the required IFS posting up to the start of facility construction.** The purpose of the IFS deposits before construction is to ensure that the generation projects continuing in the queue are serious and well-considered. However, a 20% IFS posting for the enormous interconnection-cost estimates in many of the Transition Cluster studies, with no upper limit, would far exceed the level needed to demonstrate these qualities.

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<sup>1</sup> LSA represents ten of the nation's largest developers and providers of utility-scale solar generating resources. Collectively, LSA's members have contracted to provide over 5 gigawatts ("GW") of clean, sustainable solar power under contract to California's load-serving entities ("LSEs"). Its members develop, own and operate various types of utility-scale solar technologies, including photovoltaic and solar thermal system designs. LSA, and its individual member companies, are leaders in the renewable energy industry, advancing solar generation technologies and advocating competitive market structures that facilitate significant integration of renewable energy throughout the western United States. LSA actively represents the interests of utility-scale solar development in California, Arizona, and Nevada, and also works to shape regional and federal policies that affect solar development.

As pointed out by CalWEA, in many cases, such large deposits, years before plant construction even begins, would undoubtedly lead to abandonment of many otherwise-viable projects, unless they have the very deep pockets possessed only by large utilities. California is already troubled by early cancellation of projects needed to meet the state's ambitious RPS goals, and unreasonable early deposit requirements would only exacerbate that problem.

LSA proposes that the CAISO cap the Initial IFS posting to the lesser of: 1) the current 20% of the estimated upgrade costs; 2) the \$20,000 per MW set forth in proposed IFS release terms (discussed below); or 3) \$5 million. LSA believes this cap balances the need to demonstrate project viability against the need to recognize the real-world financing constraints faced by even the most viable projects at this stage of their development.

In addition to this proposed cap, LSA also suggests that the CAISO credit LOC deposits to the Transmission Provider required by PPA against the posting requirement in recognition that such deposits satisfy the goal of demonstrating serious intent and viability.

- **Reduce IFS posting amounts for the IR modifications already allowed under the current rules**, as described below. These additional changes are the logical counterparts to its proposals above:

- Develop an IFS “subtractor” for IR changes from Full Capacity to Energy-Only; and
- Reduce the IFS posting proportionately for reductions in IR MW capacity.

If the CAISO can approximate appropriate IFS increases for IR upgrades, it should be fully able to approximate appropriate IFS decreases for IR adjustments in the opposite direction.

- **Clarify Certain Issues Regarding the Timing of Postings:**

- The 100% LOC should be due at earlier of IC's notice to CAISO pursuant to the LGIA to proceed with construction activities or start of construction activities.
- Clarify that, to the extent the upgrades involve discrete projects (e.g. new breakers which could begin quickly and a major new transmission facility that might take years to permit), each upgrade project is funded separately based on the authorization or construction date of the specific project.
- Clarify that the IC's obligation to maintain the Phase 2 financial security and make payments for Network Upgrades terminates at commercial operation of the IC's generating facility.

## Changes to Interconnection Requests

The CAISO proposes to allow Interconnection Customers (ICs) to make two additional changes to their Interconnection Requests (IRs) following release of Phase 1 Study results:

- **Change in IR status from Energy-Only to Full Capacity**, in return for an adder to the required Interconnection Financial Security (IFS) posting of 20% of cost responsibility after the Phase 1 Study; and

- **Increase of up to 30% in IR MW capacity**, in return for an increase in the IFS posting from 20% to 30% of costs, for Network Upgrades.

Subject to certain conditions and clarifications, LSA supports the CAISO’s proposal to allow interconnection customers to switch from “energy only” to “full capacity” deliverability following the transition cluster Phase 1 Study. The conditions/clarifications are: 1) this policy should apply only to the transition cluster (as this switch in deliverability without a new interconnection request is a one-time only opportunity and to avoid future gaming opportunities)<sup>2</sup> and should not be applied to future interconnection requests; 2) entities that designated “full capacity” in their original interconnection requests should not be delayed or harmed by allowing others to switch to “full capacity” following Phase 1. With regard to the latter, LSA believes the CAISO should link this proposal to the proposal to cap costs on the Phase 1 deposits in section 9.2 and allow the projects that had initially selected Full Delivery to receive cost allocation following Phase 2 that is the lesser of the allocation that they would have received had the switching project(s) stayed energy only or the allocation they receive with the switching projects identified as full delivery. LSA believes this proposed cost cap is critical to ensuring that non-switching entities are not adversely affected by allowing others in their cluster to change their deliverability. In addition, LSA recommends that the proxy methodology include a proxy subtractor for the non-switching full capacity customers in the cluster. This subtractor should be implemented in time to adjust the postings due following Phase 1.

LSA also supports the concept of allowing developers some flexibility to increase their IR MW capacity. While LSA does not oppose the 30% increase proposed by the CAISO, it believes a smaller increase (e.g. 20%) would provide sufficient flexibility. LSA agrees with CalWEA that this concept requires development of a reasonable methodology for the IFS adder and that the CAISO should consider an IFS increase that is proportional to the actual MW capacity increase instead of a straight 30% posting requirement.

## **LSA comments and questions about other CAISO proposals**

**Cost allocation for “short-circuit” related Reliability Network Upgrades between projects in a cluster:** The CAISO proposes to allocate “short circuit related” Reliability Upgrades in a manner different from other Reliability Upgrades, i.e., based on the “short circuit duty contribution” of each unit in the cluster, instead of the maximum-capacity allocation for other such facilities. LSA supports this proposal because it would recognize the very different short circuit duty contribution of solar photo-voltaic facilities compared with other technologies.

### **IFS posting requirements – Second and (proposed) Third Postings**

- **Total IFS Posting for Network Upgrades:** The CAISO proposes to reduce the total required IFS posting for Network Upgrades to reflect:
  - **The lower of Phase 1 or Phase 2 Study results**, if the IC made no changes to the IR; or
  - **The Phase 2 Study results**, if: (1) the IC increased IR MW capacity or upgraded from Energy-Only to Full Capacity status; (2) the Phase 2 Study allocated costs were higher; and (3) the CAISO demonstrates that the IR change was responsible for the cost increases.

<sup>2</sup> LSA expresses no opinion regarding any future tariff or policy changes that might expand this opportunity beyond the transition cluster with appropriate protections against gaming. For the time being however, LSA believes this policy should apply to the transition cluster only.

LSA fully supports this proposal, especially in light of concerns about the CAISO methodology and the proposal to allow changes in capacity or deliverability.

- **Timing of Additional Postings – postponing some of the second IFS posting until construction of needed upgrades:** The CAISO proposes to lower the IFS posting required 180 days after Phase 2 Study results to 30% of the total IFS requirement. The IFS requirement would be extended at this level until the start of upgrade construction. This would greatly reduce the cost to carry an LOC or other IFS for what could be many years before actual construction begins.

LSA fully supports this proposal and compliments the CAISO for offering it.

**Limited post-IA execution IFS release terms and allowed reasons**

- **Limited IFS release after IA execution:** The CAISO proposes to change IFS release terms, as shown below.

<b>TIMEFRAME</b>	<b>IFS RELEASE - current</b>	<b>IFS RELEASE - proposed</b>
<b>Initial IFS posting until Phase 2 Study completion + 6 mos.</b>	10% (half the 20% or \$500K posting) - \$250K minimum forfeit	Set maximum \$ at risk at \$10K per MW
<b>Phase 2 Study completion + 6 mos. until Phase 2 Study completion + 12 mos.</b>	50% (of the posted 100% or \$500K) - \$250K minimum forfeit	Double maximum \$ at risk, to \$20K per MW Extend this limitation until construction commencement
<b>Phase 2 Study completion + 12 mos. until Phase 2 Study completion + 18 mos.</b>	20% (of the posted 100% or \$500K) - \$400K minimum forfeit	Delete this provision entirely
<b>After construction commencement (regardless of time since Phase 2 Study completed)</b>	0% - \$500 K minimum forfeit	No change proposed

LSA fully supports this proposal with the understanding that the amounts set forth are the amounts at risk for the developer and not the amounts subject to refund.

- **Reasons justifying an IFS release:** The CAISO proposes no change in this area. LSA supports CalWEA’s proposal to add a provision addressing the loss of a PPA due to the Phase 2 construction timeline (see CalWEA comments). In addition, LSA recommends a clarification to the provision allowing IFS release where the project is denied a necessary permit. LSA suggests that the CAISO add language allowing IFS release if a permit is obtained but is materially different from the permit sought by the developer. The purpose of this proposal is to recognize that some agencies, while not denying a permit outright, may attach conditions to permits that render projects uneconomic or otherwise infeasible. In these circumstances, the project is in essentially the same position as one whose permit application was denied.
- **Site Exclusivity:** Section 3.5.1 of Appendix Y of the CAISO tariff requires that the interconnection customer demonstrate site exclusivity through the projected commercial operation date (COD). LSA recommends that this be clarified such that a lease option that provides an interconnection customer with an exclusive right to obtain a lease through the COD satisfies this requirement even where the lease option expires prior to the COD, provided that the option is either exercised or extended prior to its expiration. (In other words, the developer would not be required to post the additional \$250,000 for site exclusivity for as long as the lease option has not expired and the underlying lease would extend at least through the COD.)

## The Longer-Term Issues: Review of CAISO methodology and GIPR Schedule

The “quick fixes” discussed above are critical and urgent. However, they are treatments for the symptoms of much more basic problems in the CAISO’s interconnection process. The root cause of the security deposit problems is the method for calculating upgrade costs. Promptly after addressing the dangerous symptoms, the CAISO needs to get at the root problem by developing a much more realistic method for estimating upgrade costs. In addition, the CAISO also needs to address the overall schedule of the LGIP.

LSA concurs with the comments of CalWEA that it would be advisable to conduct “a more thorough review of the details of the CAISO’s upgrade cost estimate methodology, especially in view of the recent results, through an open stakeholder process.” In addition to issues regarding the per-unit costs used by the PTO’s and the sequencing of the deliverability and reliability assessments as described by CalWEA, LSA notes that the transition cluster Phase 1 estimates are further inflated by the assumption that every project in the serial group will achieve full commercial operation on schedule. As the CAISO is well aware, the serial group projects were grandfathered from the recent GIPR reforms intended to “weed out” the queue. While LSA continues to support such grandfathering in the interest of not changing the rules on projects mid-stream, the lack of any “weeding-out” of the serial group makes the assumption that all serial group projects will come on-line unrealistic with regard to estimating deliverability costs for the transition group. Combined with the “peak” load methodology used for deliverability, this assumption is a major reason why the deliverability cost estimates for the transition cluster are high. We recognize the CAISO’s dilemma that it must consider all generators that have applied to the LGIP while, at the same time, recognizing that all will not proceed. That is why we think this takes further discussion than the “quick fix” timeline allows.<sup>3</sup>

In addition to the upgrade cost method, LSA urges the CAISO to consider reforms that will shorten the time required for interconnection. The current LGIP, while an improvement over its predecessor, remains a major impediment to timely achievement of the state’s RPS goals as well as to obtaining federal stimulus grants and loan guarantees. The LGIP requires a minimum of 330 days and as much as 510 days to obtain an LGIA. Moreover, this assumes all tariff deadlines are met and does not include the time for the permitting and development of transmission upgrades. In the near term, such timing is inconsistent with the federal stimulus deadlines requiring the start of construction by the end of next year. In the longer term, it is inconsistent with the commercial operation dates of many power purchase agreements intended to meet the state’s RPS requirements. As lengthy and difficult as the federal/state/local permitting process is in California, it is the CAISO’s interconnection process that is becoming the most time consuming element in project development.

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<sup>3</sup> This problem is exacerbated to the extent the method fails to include all the transmission identified as necessary for the serial group projects, including transmission not yet approved in the planning process, in the transition group base case. If it is the case that the transition group base case includes all the serial group projects but not all the serial group transmission upgrades, then it is self-evident that the method would vastly overstate the transition group upgrade responsibility even if all the serial group projects achieved operation.

LSA has no desire to delay the process already in motion for Transition Cluster projects and believes that this methodology and schedule review should be initiated soon, with completion targeted before these projects enter the 2010 Transmission Planning Process next year. In the meantime, the regular process should continue, subject to the changes LSA has recommended in these comments.

## **Conclusion**

LSA fully understands the challenges faced by the CAISO and the utilities in reviewing the many proposed projects in its process. LSA also appreciates the diligence and ability of the CAISO and utility staff involved in that process. LSA particularly appreciates the CAISO's recognition of the serious problems with its process as represented in this market notice. The LGIP is significantly and unreasonably delaying improvements to the State's economy and its environment by overstating upgrade costs and taking too long to resolve interconnection issues. California needs a more efficient, timely, realistic and accurate interconnection process to meet its electric energy and environmental goals. LSA is committed to working with the CAISO and the utilities toward that end.