



January 5, 2011

Submitted by email to the CAISO at DeliverDG@caiso.com

RE: Comments of the Large-scale Solar Association on the CAISO's Deliverability for Distributed Generation Issue Paper and Straw Proposal

The Large-scale Solar Association (LSA) submits these comments on the CAISO's December 12th document entitled Issue Paper and Straw Proposal – Resource Adequacy Deliverability for Distributed Generation (Proposal).

The Proposal contains initial CAISO ideas about assessment and allocation of available deliverability to Distributed Generation (DG) resources, so those resources can be counted toward meeting Load-Serving Entity (LSE) Resource Adequacy (RA) Requirements (RARs). This initiative is intended to support the state policy objectives of a 33% Renewables Portfolio Standard (RPS) and 12,000 MW of DG by 2020.

The proposed methodology would: (1) identify deliverability at “a set of specified CAISO network nodes” that is available without additional upgrades, in a manner that is “aligned with” the Transmission Planning Process (TPP) resource portfolios and protects deliverability of generation already in the queue; and (2) allocate that deliverability to Local Regulatory Authorities (LRAs), which would apportion it to applicable DG generation projects.

It is difficult to offer specific comments, since there are many Proposal details that are not yet developed. However, LSA offers these three general comments for the CAISO's consideration, which are further explained in the remainder of this document:

- Access to available transmission capacity should be made available to all generation types and sizes on a non-discriminatory basis.
- To ensure that deliverability capacity is available on a non-discriminatory basis, the process for addressing DG deliverability should be coordinated with and incorporated into the TPP-GIP integration process under development. Ideally, there would be a single process to address deliverability for all generation projects.
- The CAISO should explain the difference between the DG assessment included in this year's TPP policy-driven analyses and the proposed methodology for DG deliverability in this initiative.

LSA's comments specifically do not address the stakeholder-input questions asked by the CAISO. LSA believes that those questions are premature, since they seem to assume adoption of a structure similar to that in the Proposal and determination of DG Deliverability as a separate process. However, as indicated in these comments, LSA believes that the CAISO should reconsider key elements of the Proposal and should integrate it into the transmission planning and generator interconnection processes now under development.

Non-discriminatory access

As noted above, the Proposal would first determine available deliverability at locations where DG is identified in the TPP portfolios. This is a sensible step in any case, for all nodes on the CAISO grid, since this deliverability availability information may be useful for developers of all types of generation (both DG and non-DG).

However, LSA is concerned that the proposed process for allocating deliverability for DG projects could create equity and discrimination problems, for several reasons.

First, the determination of available transmission capacity must consider, not only CAISO-queued generation projects, but also those in the WDAT interconnection queues. That may be the CAISO's intent and is already CAISO practice, but the Proposal does not mention those other projects explicitly.

Second, the Proposal could result in discriminatory treatment of later-queued projects in the regular GIP, in two ways:

- **Reserving capacity for DG projects.** It appears that available capacity identified through the proposed process would effectively be reserved for DG projects only (essentially, as free-riders for capacity funded by higher-queued projects) and could not be used for RA deliverability of other resources, even if there were no specific DG projects proposed at the time that could use the allocation. (The TPP portfolios are based on 2020 requirements; since DG projects may have short interconnection lead times, those that will be operating in 3-8 years likely will not yet be identified.)

Thus, while the proposed process would “respect” the deliverability of current interconnection-queued projects, those applying later through the GIP would not have access to this available capacity and could be assigned greater transmission-cost responsibility than would otherwise be the case. It is unduly discriminatory to reserve capacity for DG that has not yet materialized instead of making that capacity available for similarly-situated non-DG generation.

- **Identifying too much capacity for DG.** The Proposal could identify capacity as “available” for DG that is not really available. Upgrades could then be triggered in studies for later-queued GIP projects that are really attributable to DG projects.

For example, it is widely recognized that at least some of the interconnection cluster studies already conducted will probably have to be redone, due to both: (1) the CAISO's efforts to remove non-viable projects from the queue through its new queue-management efforts; and (2) the likely inability of most projects in the queue to obtain a Power-Purchase Agreement (PPA), given the size of the queue compared to the RPS capacity need. The CAISO is planning to release next week a proposal that may include re-study of Clusters 1-2 and a revised methodology for the Cluster 3-4 Phase II Studies.

These upcoming restudies are likely to reduce the upgrades triggered by projects currently in the queue. Thus, the CAISO should not rely on the results of the prior studies to determine DG deliverability; instead, it should wait until those restudies are complete, to ensure a more accurate determination of available capacity. Failure to do so could result in identification of “available” DG capacity from transmission projects initially triggered by higher-queued GIP generation projects, due to the re-studies, would no longer be needed for those GIP projects – i.e., the “available” DG capacity would not really exist.

Inclusion of this DG in the Base Cases for later GIP cluster studies could trigger upgrades for those GIP projects that are actually needed to provide deliverability to the DG. This, in turn, could transfer cost responsibility for those DG deliverability upgrades to Cluster 5 and later GIP projects.

Third, the Proposal could treat similar-sized projects differently. The Proposal defines DG resources as “relatively small-scale resources connected to utility distribution systems and located close to load.” However, the new process would apply, not only to Rule 21 projects – largely small “behind the meter” installations which have historically not required any deliverability analysis – but also to WDAT interconnections, with no apparent size limit.

Because of the vastly different voltage cutoff between the CAISO transmission system and the distribution systems for the different PTOs, a project could be 50 MW or greater on the SCE system and still utilize the new DG procedures, while a similar-size project in the PG&E or SDG&E areas could not. There is no reason to treat otherwise similar generation projects differently with respect to transmission access, and the CAISO should consider other criteria for use of the new process besides Rule 21 or WDAT vs. GIP status.

Coordination with TPP-GIP Integration

The CAISO is in the midst of a major overhaul of its interconnection process to better integrate it with the annual TPP. This integrated process would determine and allocate transmission capacity needed to achieve the 33% RPS target and could result in much greater generator responsibility for transmission costs that are not included in the transmission plan. This feature makes it especially important that DG projects not take transmission capacity that should be reserved for projects already in the queue, or have other preferential treatment with respect to transmission access.

Thus, the CAISO should consider how the Proposal, and the procedures it would include, would relate to the new TPP-GIP process. The CAISO should not implement rules for DG Deliverability in the next few months, only to have those rules be modified because of actions taken in the TPP-GIP integration. For example, the DG deliverability cycles (annual or otherwise) should be synchronized with the applicable steps in the TPP-GIP cycle, and the respective processes should use the same Unified Planning Assumptions.

In fact, LSA does not see any reason that the two initiatives should not be combined. If the CAISO is going to modify the transmission planning and generation interconnection processes, it should consider all components of transmission and interconnection, in order for any new reform effort to function properly. Ideally, the DG Deliverability process itself would become part of the new TPP-GIP process, and the next Proposal version should consider how that integration could be achieved.

Relationship to recent TPP DG analyses

The policy-driven analyses for the 2011-2012 TPP cycle were released in December. Those analyses included assumptions about the amount and location of DG resources, based on the TPP resource portfolios. As noted above, those DG resources triggered criteria violations in some areas, and presumably transmission upgrades will be proposed in the final plan to mitigate those violations.

The Proposal would also use the TPP portfolios as a basis, so it is not really clear how the proposed process would differ from the methodology already used by the CAISO. The CAISO should clarify the differences between the two methodologies and whether the Proposal would require changes in its TPP DG analyses.