February 12, 2014

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

RE: Comments of the Large-scale Solar Association on revised draft 2013 Stakeholder Initiatives Catalog

The Large-scale Solar Association (LSA) hereby submits these comments on the January 18 version of the 2013 Stakeholder Initiatives Catalog (Catalog). This revision incorporates stakeholder rankings on the issues included in the last version. It also includes: (1) draft "roadmap" of issues that the CAISO proposes to address in each quarter of 2014; and (2) list of issues that the CAISO might address in 2014 if time and resources are available (Backup List).

LSA's comments focus on two issues:

- Classification of the Affected Systems issue (Section 14.6) as a Backup List item; and
- The addition of a new issue – Active Power Control Interconnection Requirements for Variable Energy Resources (Section 14.1) (Interconnection Requirements) – to the Draft Catalog, to be addressed starting in the third quarter of 2014. The new item is described as follows:

> This initiative would consider various interconnection requirements for both small and large asynchronous generators (principally solar and wind). In 2010, FERC rejected without prejudice interconnection requirements the ISO proposed for large asynchronous generating facilities. The ISO proposed to require these facilities to have reactive power, automatic voltage control and active power management capabilities. This initiative would consider whether to resubmit one or more of the proposed requirements to FERC as well as examine whether to include inertial response as an interconnection requirement for asynchronous generating facilities.

Specifically, LSA recommends that the CAISO:

- Remove the Interconnection Requirements effort from the 2014 Road Map and reconsider it when the need can be more fairly assessed – i.e., after: (1) the conclusion of the CAISO's initiative to address another issue – Frequency/Inertial Procurement (Section 9.4) – which is mandated by FERC; and (2) implementation of the Flexible Resource Adequacy Capacity/Must-Offer Obligation (FRAC/MOO) framework currently under development; and
- Replace the Interconnection Requirements effort with the Affected Systems issue in 2014.

There are many reasons for taking the actions recommended by LSA above.

First, any new Interconnection Requirements would likely not apply to much new generation on the CAISO system. In its Order on Tariff Revisions in Docket No. ER10-1706-000 (dated August 31, 2010) (Order), regareding the CAISO's earlier proposals in this area, FERC agreed with Sempra and LSA that any new rules should not apply to Interconnection Customers (ICs) that had already been tendered Generator Interconnection Agreements (see p.8 of the Order).

Since the CAISO seems to be considering here rules similar to those proposed in its earlier filing in that case, it is reasonable to assume that this exemption would also apply. That would exempt Cluster 4 and earlier-queued projects and, by the time that any new standards are filed, Cluster 5 (and perhaps even Cluster 6) projects as well.

Therefore, any new standards would likely apply to only a small amount of new generation. Moreover, many (if not most) of those projects could be smaller and more geographically scattered than those earlier in the interconnection queue – i.e., with less impact on CAISO operations than those higher in the queue – thus further reducing benefits from new rules.

Second, this item seems premature. On the most recent stakeholder conference call for the 2013 Catalog process, the CAISO said that this item was included (too late to consider in the regular stakeholder ranking procedure) because it was somewhat related to another item added in the latest Catalog version – Frequency/Inertial Procurement (Section 9.4) – which is mandated by FERC. Upon further questioning, however, the CAISO admitted that the latter really was a separate issue and did not necessarily follow from the former. LSA agrees.

The new Frequency/Inertial Procurement item is described in the Catalog as follows:

> FERC approved NERC standard BAL-003-1 in January 2014, which mandates new Frequency Response standards. This initiative would address any changes necessary to be in compliance with the new standards as well as potentially additional enhancements. The increase in renewable resources may result in operational concerns due to lower system inertia. In order to address this emerging operational need, the ISO may also potentially consider additional products or services necessary to maintain system inertia within this initiative.

So, it appears that the CAISO plans to examine "additional products and services necessary" to meet the new FERC standards under the Frequency/Inertial Procurement item. That initiative should include an assessment of whether any additional capability is needed to meet the new FERC standards, as well as the most effective and economic means to meet this standard if such additional capability is needed.

The CAISO should only consider additional mandatory requirements for generators if the CAISO's consideration of the FERC mandate demonstrates both that additional capability is needed and that new interconnection requirements are the most effective and economic means to provide it. LSA notes that one of the grounds for FERC rejection of the earlier CAISO proposals was lack of adequate justification for those proposals (see p.17 of the Order), and the CAISO should try to avoid making the same mistake here.

Thus, until the CAISO completes its work for the Frequency/Inertial Procurement item, it cannot effectively consider whether new generator requirements are needed. Since work under the Frequency/Inertial Procurement item will not even begin until the second quarter of 2014, it is not clear how that work would have progressed sufficiently to allow commencement of the Interconnection Standards initiative in the third quarter of 2014.

As the description of the Interconnection Standards item in the Catalog indicates, and the CAISO effectively admitted on the conference call, consideration of any new generator standards to meet the FERC requirement does not automatically mean that the CAISO's other proposals rejected by FERC should also be reconsidered. For example, the CAISO has conducted no additional studies indicating that active power management or ramp-rate control by VERs is needed.

In fact, since the FERC order, the CAISO has begun a number of other initiatives to obtain the same kinds of services as its earlier generator-interconnection proposals, using more rational and market-based approaches. Requirements for Flexible Resource Adequacy Capacity/Must-Offer Obligations (FRAC/MOO) and the proposed new Flexible Ramping Product (FRP) should help meet the CAISO's needs for flexibility and ramping without imposition of potentially costly and inefficient mandatory requirements on generators.

(In addition, there is no there is no reason at this point to presume that any new generator-interconnection requirements should apply only to VERs. As LSA pointed out in its response to the CAISO's earlier proposals: (1) the resulting capability would support general system needs (e.g., CAISO VAR support needs at any given time or location might not relate at all to VERs, and VARs provided by any generator could help meet those needs); and (2) the required capability would benefit the system regardless of the technology of the generator providing it.)

Finally, dropping the Interconnection Standards item will free up resources that can be used for the Affected Systems initiative instead. As LSA has described at length, the Affected Systems initiative would address real-world and clearly identified problems that continue to plague the generator-interconnection process, and the benefits of resolving those problems are clear. These problems are severe and justify an attempt by the CAISO and willing Affected System entities to undertake, at a minimum, voluntary coordination of interconnection studies and, ideally, combination of the study process into a single unified procedure.