



December 5, 2014

Submitted by Rachel Gold and Susan Schneider via email to the CAISO at [SHcatalog@caiso.com](mailto:SHcatalog@caiso.com)

**RE: Comments of the Large-scale Solar Association on “Revised Draft 2015 Stakeholder Initiatives Catalog”**

The Large-scale Solar Association (LSA) hereby submits these comments on the high-level initiative rankings in the CAISO’s November 19, 2014 document, “2015 Stakeholder Initiatives Catalog”. LSA’s feedback is shown in Attachment 1.

As the CAISO requested on the November 21 conference call, LSA’s comments propose specific changes to the CAISO’s rankings for different initiatives. LSA does not have any comments on the issues not shown below.

In particular, LSA strongly urges the CAISO to include both the Affected Systems and Interconnection Process Enhancements in its initiative roadmap for 2015. The CAISO has committed to the both developers and Affected Systems to hold an initiative to address unresolved issues from the process earlier this year, and changes should be considered to the GIDAP (as well as other interconnection-related practices) now that an entire GIDAP cycle has passed.

Attachment 2 contains recommended language changes for three initiatives:

- **Affected Systems**, to update the CAISO’s description of the issue. That description described this year’s effort but did not state what a future initiative would address.
- **Active Power Control Requirements for VERs and Reactive Power Control Requirements**. As noted before, LSA opposes the CAISO’s singling-out of VERs in the definition of these items. The CAISO’s prior response – that LSA can suggest changes in the stakeholder process if the CAISO moves forward with this effort – it true of any item and any issue. It may make sense for VER rules in this area to be different from other technologies for legitimate technical or policy reasons, but LSA objects to the automatic presumption that VERs would be treated differently.

In addition, the definition should make it clear that (pursuant to FERC directives) the CAISO should demonstrate the need for these changes in addition to the other market reforms (e.g., Flexible Ramping Product) that would seem to address the same thing.

## I. LSA Comments on CAISO Initial Scoring and Rankings

Sect #	Initiative	Grid Rel	Mkt Eff	SH Suppt	Total Bens	Mkt Part Impl	CAISO Impl	Total Feasibility	Total Rank	LSA COMMENTS
11.14	Multiple Resource IDs per Gen. Meter	3	7	3	13	7	7	14	27	<b>Stakeholder Support score should be 0 or 3.</b> This item has been in the SIC several times, but there has been little or no interest in the past and no additional justification offered here for why this item is needed now.
2.40	Multi-Stage Generator BCR	3	3	7	13	7	7	14	27	Suggest combining this item with Hourly Bid-Cost Recovery Reform.
11.10	PacifiCorp Related Tariff Changes	3	7	3	13	7	7	14	27	<b>Market Efficiency and Market Participant Implementation should be 3.</b> LSA supports changes to improve and refine the EIM. However, this item should not displace initiatives that would offer greater benefits to a larger number of CAISO BAA Market Participants.
10.7.1	Comprehensive Review Methodology for Determining MIC	3	3	7	13	7	7	14	27	<b>The Stakeholder Support score should be 3, and the Market Participant and CAISO Implementation scores should be 3.</b> There is no indication that the CAISO's current MIC/TIC structure has not allowed more MIC where the historical-based method does not accommodate needed RPS development. In addition, wholesale revision will trigger transitional problems, since LSEs executed their 33% RPS contracts assuming continuation of the current methodology.
10.7.3	Allocation of MIC Among LSEs	3	3	7	13	7	7	14	27	<b>The Stakeholder Support should be 0 or 3, and the Market Participant and CAISO Implementation scores should be 3.</b> Wholesale revision will trigger transitional problems, since LSEs executed their 33% RPS contracts assuming continuation of the current methodology.
12.70	Affected Systems	3	3	7	13	7	7	14	27	<b>Stakeholder Support and Market Efficiency scores should both be 10.</b> This issue: (1) has caused significant market risk and project financing problems; and (2) required significant CAISO and Market Participant efforts in the recent past, and continues to do so. For these reasons, both developers and frequent Affected Systems strongly support prompt CAISO action, and CAISO has already committed to undertake this effort.  (Note that none of the PTOs/Distribution Providers seem to support the recent CAISO approach, since none has adopted the recent CAISO tariff changes in their own distribution-level tariffs.)  LSA also suggests that CAISO update the description of this item to cover what a future initiative would cover – see Attachment 2.

Sect #	Initiative	Grid Rel	Mkt Eff	SH Suppt	Total Bens	Mkt Part Impl	CAISO Impl	Total Feasibility	Total Rank	LSA COMMENTS
4.10	Consideration of Non-RA Imports in RUC Process	3	7	3	13	10	3	13	26	Market Efficiency should be 3. RUC expenses have not been significant, and RA resources bid at \$0 have addressed nearly all RUC needs at very low cost.
10.20	Active Power Control Interconnection Requirements for VERs	3	3	3	9	7	10	17	26	The CAISO Implementation score should be 7. In addition, LSA strongly urges CAISO to revise the initiative description.  Suggested language has been provided in the second attachment below.
10.30	Reactive Power Control Reqs	10	7	3	20	3	3	6	26	
10.10	2015 Interconn. Process Enhancements	3	7	7	17	3	3	6	23	Market Efficiency and Stakeholder Support should be 10, CAISO Implementation should be 7, and Market Participant Implementation should be 10. Prior CAISO reforms have significantly improved the interconnection process and greatly facilitated project development.  Moreover: (1) adjustments should be considered for the GIDAP now that CAISO and Market Participants have experience with the new rules; and (2) recent market changes in the 18+ months since initiation of the last IPE effort have identified new issues that should be addressed.
11.12	Storage Generation Plant Modeling	3	3	3*	9	7	3	10	19	The Grid Reliability score should be 7, and the Market Efficiency score should be 10. LSA is concerned that poor modeling of storage is resulting in underestimates of the amount of solar and other variable generation that can be supported by the CAISO system and could lead to over-procurement of other flexibility resources and market products.

## II. Suggested Revisions in Initiative Descriptions

### **10.2 Affected Systems (D)**

On August 5, 2013, the ISO issued a market notice announcing the start of a new stakeholder initiative titled “Affected System Impacts of Generator Interconnection.” The goal of the initiative was to add further detail to the ISO’s business practice manual for generator interconnections on the processes and principles for addressing "affected system" impacts in situations where generator interconnection to the ISO controlled grid affect neighboring systems and where generator interconnection to facilities outside of the ISO controlled grid affect the ISO system. In Q3 2014, the ISO incorporated into its business practice manual new affected systems language that was developed in the affected systems initiative.

This initiative would further improve Affected Systems procedures by designing and implementing reforms that would result in better timing and coordination (and possible integration) of CAISO and Affected Systems studies.

### **10.3 Active Power Control Interconnection Requirements (D)**

This initiative for variable energy resources 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 specifically focus on active power control interconnection requirements for ~~asynchronous~~ generating facilities, if additional capability is needed after consideration of already-planned reforms (e.g., Flexible Ramping Product implementation). Different requirements and rules may be developed for Variable Energy Resources (wind and/or solar) if justified by technical factors.

### **10.4 Reactive Power Requirements (D)**

The initiative for ~~variable energy generating~~ resources would consider ~~proposing~~ a tariff amendment requiring ~~all asynchronous~~ generating facilities to have net reactive power sourcing and absorption capability sufficient to achieve or exceed a net reactive power range of approximately 0.95 leading and 0.95 lagging while maintaining a scheduled voltage at the point of interconnection of the facility to the grid. Different requirements and rules may be developed for Variable Energy Resources (wind and/or solar) if justified by technical factors.