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Submitted by email to the CAISO at CostAllocation@caiso.com and FRP@caiso.com

RE: Comments of the Large-scale Solar Association on, "Cost Allocation Guiding Principles – Draft Final Proposal"

The Large-scale Solar Association (LSA) hereby submits these comments about two CAISO documents issued on March 15th and discussed at a March 19th stakeholder meeting:

- **"Cost Allocation Guiding Principles – Draft Final Proposal"** (CA Proposal), CAISO's proposed principles for cost allocation generally, for all CAISO products and services; and
- **"Cost Allocation Straw Proposal – Flexible Ramping Proposal"** (FRP Proposal), the CAISO's proposal for allocating costs for the proposed Flexible Ramping Product (FRP) and the first proposed application of the principles in the CA Proposal.

Overview of LSA comments

LSA is deeply disappointed with the CA Proposal – both the process and the content. Quite simply, the CA Proposal has not received adequate consideration and is not ready to be applied to specific products and services without further work with stakeholders.

With respect to the process, the CAISO has decided to proceed with the simultaneous development of the CA Proposal and the FRP Proposal, with insufficient time to fully consider the principles identified in the former before applying them in the latter. With respect to the process, the CA Proposal makes troubling changes to several principles and fails to reflect the additional principles that LSA recommended. Other elements of the document are repetitive and would benefit from consolidation, with several "principles" simply reflecting different facets of "cost causation."

Most importantly, the CA Proposal fails to reflect (or now even mention) the need to coordinate policy and implementation with the California Public Utilities Commission (CPUC) and other Local Regulatory Authorities (LRAs). In fact, "policy" considerations have almost entirely disappeared from the document, despite the key state and federal policies that will drive the need for new products and services in the future.

LSA also believes that CAISO management should seek Board approval for this document, which when finalized will form the basis for a fundamental reexamination of cost allocation for all CAISO products and services. It is the Board's primary function to provide broad policy guidance to CAISO management, and formal approval of such an important foundational should occur before these principles are applied to individual products and services.

LSA is equally concerned about the FRP Proposal, including the disparate treatment of generation and load, the allocation of costs to generation generally, and (as with the CA Proposal, as described above) the lack of coordination with key CPUC/LRA procurement processes. As LSA mentioned in its prior comments, the CAISO's previous proposal to use the Regulation cost-allocation methodology temporarily, pending finalization of the CA Proposal, would be a much wiser and more rational course of action than rushing through a new cost-allocation proposal just to meet an unnecessary and arbitrary deadline.

These concerns are described in more detail in the remainder of this document.

CA Proposal

Overall, LSA is concerned that the CAISO apparently agrees with some stakeholders that "the guiding principles have limited value until applied to a specific product" (CA Proposal, p.5). The CA Proposal states that "it is beneficial to evaluate the appropriateness of the guiding principles by actually applying them to a specific product," but LSA disagrees that this should occur before the principles are finalized.

The principles should be established and evaluated on their own merit, and only then applied to products and services. These later applications may identify additional issues, and of course the principles may change over time as their drivers (and the CAISO markets) evolve. However, that is not an excuse for rushing through the principles development, or providing insufficient explanation of the proposed principles and how they will be applied.

LSA objects most strongly to the changes in the explanation of what was called "Policy Alignment" in the Straw Proposal and is now entitled "Accurate Price Signals."

The prior version referenced the influence of policy considerations in deciding whether, for example, to allocate costs to LSEs procuring resources "that drive certain costs" or to those resources themselves. The CA Proposal version removes discussion of this type of tradeoff; instead, rather than recognizing the importance of consistency with state/federal policy goals, it suggests that CAISO price signals should drive those policies by concluding that the role of CAISO price signals is "informing and influencing development of state and federal policy that are independent of the ISO markets."

In addition, the CA Proposal "clarifies" that the CAISO's intent was not to imply that "the ISO would consider not allocating costs to a specific class of market participants because state and/or federal policy has prioritized development of specific technologies and/or has provided benefits to a certain class of market participants."

LSA understands that receiving one benefit does not entitle a resource to another benefit, but the "Policy Alignment" principle should have a different purpose. A Policy Alignment principle would encourage consideration of how the allocation of certain costs fits within the broader policy framework. In essence, the CAISO has only limited ability to shape the energy landscape, because a great portion of the decision-making should occur on a long-term basis. The larger framework should drive cost allocation within the day-to-day markets, not the other way around.

The CAISO has acknowledged that generators cannot make capital investments based on short-term markets. The CAISO should also acknowledge the matching principle that

generators need long-term certainty. Long-term contracts with the PPA buyer allow generators – including renewable generators – to financially afford operational flexibility that the CAISO desires.

Moreover, CAISO cost-allocation methodologies should at least avoid confounding state/federal policies. For example, the CPUC has inserted a placeholder in its "Least Cost, Best Fit" (LCBF) framework for integration costs, indicating its intent to consider such costs in its procurement-evaluation process. In that forum, such costs can be forecasted by the CAISO and the CPUC – who are certainly better positioned than generation developers to estimate such costs – and considered in LSE procurement decisions.

Resources expected to require higher integration costs would have a higher bid evaluation adder (and thus be less competitive and/or receive less-attractive LSE price offers) under this framework. A default allocation of integration costs to the PPA buyer would complement this structure, and these two elements together would allow efficient decision-making and lower ratepayer costs. However, if the CAISO then charges resources directly for the same costs in its markets, those resources would effectively bear these costs twice.

This coordinated structure would allow CAISO cost-allocation methods to support state policy goals and not undermine them. By contrast, a structure that allocates uncertain costs not under their control directly to the generator may jeopardize the ability of VERs and other generators to use project financing and would raise financing costs, raising costs to ratepayers overall and jeopardizing the ability of LSEs to meet their RPS mandates. This tradeoff should be considered by the CPUC and other LRAs and reflected in the overall policy decisions, rather than decided based on one interpretation of cost causation.

Instead of rushing through development of these principles and changing the cost allocation of an individual product FIRST, the CAISO should work with the CPUC and other LRAS to determine how the cost allocation fits in with the overall policy structure, i.e., whether a cost adder in the procurement process, and inclusion of performance incentives in PPAs, is a better mechanism to achieve the state's overall goals than assigning costs through CAISO markets. Further, it may be a valid policy decision to encourage LSEs to take contained risks, e.g., where the relative price benefits of a technology outweigh the integration-cost uncertainties.

At the stakeholder meeting, the CAISO cited an example of two suppliers – one that "responsibly" includes integration costs in its bid price but loses out to another "irresponsible" supplier ignoring such costs. However, when asked about the most immediate "integration service" – the FRP – which is actually a known product with an actual proposed cost allocation, the CAISO was unable to provide an estimate of even near-term likely costs.

The CAISO was also unable to answer the related follow-up question of how so-called "responsible" developers would be able to estimate the costs of unknown products and services 15-30 years into the future. Therefore, rather than simply allocating the costs to individual suppliers, who are much less able to estimate and manage such uncertain costs than LSEs and for which the financing penalty will be great, it may be an appropriate policy decision to allocate those costs to the LSE buyer and rely on those buyers (and their regulators) to incorporate those uncertainties in the procurement and PPA process.

LSA agrees with the CAISO that the cost of these services should be transparent, so that rational procurement decisions can be made and appropriate performance incentives can be incorporated into PPA provisions. The CAISO should provide accurate price signals, but the policy implications of the cost allocation (i.e., to whom the signals are sent directly) must be considered in order to avoid harming governmental policy objectives. If integration costs, for example, are considered in LSE procurement decisions, and then CAISO market costs are allocated to LSEs based on the integration needs of the resources in their portfolios, this would provide a rational and logical "cost-based" process overall without usurping the ability of the CPUC/LRAs to make holistic procurement decisions or imposing uncertainties that could harm the bilateral contracting process.

LSA also suggests the following changes to the other proposed principles:

- The CAISO should reverse the changes made in the CA Proposal to the "Incentivize Behavior" principle. The CA Proposal now states here that costs could be allocated to market participants even if they cannot change their behavior. If costs to "incentivize behavior" are allocated those that cannot change their behavior, this principle essentially becomes just another version of "cost causation."

  The CA Proposal states that the purpose of giving behavioral incentives is so that "profit maximization by market participants that are allocated costs should lead to lower costs incurred by the ISO market over a reasonable timeframe." However, profits cannot be "maximized" by recipients of price signals that cannot change their behavior.

  In addition, application of this principle should include identification of the desired behaviors (and behavioral changes). Therefore, LSA recommends that the CAISO amend its definition of the "Incentivize Behavior" principle to provide that, "During an assessment of a product for Cost Allocation, the CAISO shall explicitly identify potential behaviors that it is trying to incent, such that the allocation rules can be tested to ensure that a proposed product structure or cost allocation would most efficiently achieve the aim." As stated in the stakeholder meeting, the CAISO should consider methods to total integration costs rather than just consider cost allocation in isolation.

- The CAISO should reverse the changes in the CA Proposal to the "Manageable" principle. The CA Proposal now states here that "costs allocated to resources because of their inherent characteristics" – i.e., that they cannot avoid or control – "should not be considered to be unmanageable as long as these costs are transparent." If costs are to be allocated to market participants without regard to their ability to avoid or control them, then this principle also becomes just another version of "cost causation."

- The CAISO should consolidate "Cost Causation" with "Incentivize Behavior" and/or "Manageable" if it does not make the changes LSA recommends above to the latter two principles. As stated above, the current versions of those two principles are nothing more than different aspects of cost causation, and there is no reason to retain them as separate principles if the recommended changes are not made.

  In that case, the side issue under "Manageable" of what the CAISO has termed "appropriate transition periods and/or mechanisms for parties to assign costs in a

manner that is consistent with their contractual arrangements" should then be reflected in a <u>separate</u> principle – something like "Provide Smooth Market Transitions." This new principle should explicitly mention:

- Grandfathering and similar provisions, where appropriate, as the CAISO has included such mechanisms in several cost-allocation designs.
- The need to coordinate policy implementation with regulatory bodies like the CPUC and other LRAs. This transitional coordination need might entail, for example, implementation of a temporary cost-allocation method in CAISO markets while the CPUC and other LRAs consider how to account for the cost of the underlying product in LSE procurement decisions.
- Facilitation of bilateral long-term contracting, which is the primary means of financing new generation and other resources in CAISO markets.

<u>FRP Proposal</u>

The CAISO has proposed an interesting approach that would allow for charges based on load, generation, and imports, as summarized below.

In the proposal, Scheduling Coordinator (SCs) for "non-dispatchable" internal CAISO generators would submit 15-minute "baseline" generation amounts, separate from Energy schedules, that would be converted into 5-minute increments (by dividing by 3) and then recombined into 10-minute increments that would be used to assess the proposed 10-minute charges. (The term "non-dispatchable" was not well-defined – it could mean what the meeting slides referred to as "the PIRPs" (which apparently meant wind and solar resources, whether or not they were in PIRP – but it was not clear whether self-scheduled resources generally would be included here.)

The upward and downward deviations would be summed separately over the month. The CAISO's Downward FRP costs would be divided by the sum of the upward market deviations upward, and the CAISO's Upward FRP costs would be divided by the sum of the downward market deviations. The CAISO used the monthly netting to justify the lack of a two-tier mechanism, i.e., any costs to procure FRP above the need to manage actual deviations would be allocated to the actual deviations themselves, and not to the overall market.

LSA sees some merit in the FRP proposal, but that opinion has several key caveats.

First, separate from the magnitude and basis for the deviation charges, LSA strongly believes that the allocation of FRP costs should be, not to the resource, but to the LSE procuring from that resource. As noted above, the CPUC will be considering the cost of integration charges such as FRP in its procurement process, and other LSEs will likely do the same.

Allocation to LSE buyers is consistent with the "Cost Causation" principle, because LSEs (under the guidance of their regulators) decide the mix of resources in their portfolios and the long-term behavioral incentives in their PPAs, which in turn will drive the need for integration services like FRP. In other words, even an individual LSE has a great deal more control over the CAISO's need for such services than an individual VER.

As noted above, the CPUC (and its regulated LSEs) will be considering the cost of integration charges such as FRP in the procurement process, and other LRAs (and their jurisdictional LSEs) will likely do the same. The CAISO itself recognized this key role of LSEs in its RI-MPR1proposal to allocate PIRP "shortfalls" to LSEs and not generation resources, and this allocation would be most consistent with implementation of state RPS policy.

LSEs are best able to consider deviations at the portfolio level and can address appropriate cost responsibility and performance incentives in their PPAs. While generators require revenue certainty, procuring LSEs (through their contracting) can decide the degree to which paying for additional flexibility is an economically wise choice.

Second, LSA is very concerned that, while the FRP Proposal states that FRP costs would be allocated through SCs, it goes on to say that the CAISO intends to "implement functionality to allow assigning of the flexible ramping product cost allocation at the resource level" in order to "facilitate implementation of bilateral contracts" (FRP proposal at p.9). While LSA appreciates the CAISO's recognition of the importance of bilateral contracting, the CAISO should explain the change it is proposing here and the reason for the change.

Third, there is a strong need to consider a "grandfathering" or other transitional element for this and other entirely new products and services (as the CAISO has done with other significant market changes, like the 2012 Grid Management Charge (GMC) redesign and the Resource Adequacy Standard Capacity Product (RA-SCP) implementation). This feature would be consistent with both a "Policy Alignment" cost-allocation principle and a viable "Manageable" principle (see discussion of these principles in the CA Proposal comments above).

Allocating uncertain and unknown costs to generators with existing PPAs would put the project economics and financing at risk.

As noted above, allocating such costs to generators under new contracts would require individual developers to incorporate huge risk premiums in their price bids – far in excess of the cost to LSEs to manage these risks for their portfolios as a whole. The resulting economic inefficiency would raise ratepayer costs and undermine the bilateral contracting process, and thus undermine state policy goals.

LSA emphasizes that allocation of FRP costs to LSE buyers does not imply that such costs should be spread in without regard to the content of LSE portfolios, as some municipal utilities and their representatives seem to fear. LSE resource procurement decisions (as overseen by the CPUC and other LRAs) drive the need for FRP and other integration costs; thus, assignment of market costs associated with the resources that they procure to the LSEs procuring them would ensure a cost-based allocation without shifting costs to LSEs whose portfolios are less dependent on such services. This was the basis for the CAISO RI-MPR1 cost-allocation proposal for the "PIRP shortfall," and it is valid here as well.

Fourth, LSA has several comments, summarized below, on the technical details of the proposed cost-allocation methodology. Generally, as noted in its comments above on the CA Proposal, LSA recommends that the CAISO explicitly identify the behavior(s) that it is trying to encourage, in order to inform the cost allocation.

For example, such objectives could include consideration of ramping costs in procurement decisions, improved forecasts of ramping needs, or mitigation of ramping behavior when it is cost-effective to do so. The CAISO should also provide analysis to show if its proposed cost-allocation methodology is consistent with other measures of cost causation, as explained further below, before decisions are made on the proposal.

- The proposed "baseline" submittal is a significant improvement over the current method used to disaggregate Energy schedules. However, the CAISO should provide the option for submittal of separate 5-minute figures instead of one number for the whole 15-minute interval, to provide a more accurate profile within the latter than simply dividing the 15-minute number by three. Three 5-minute figures would be combined for the RTUC, and two 5-minute figures would be combined for settlements. Renewable generators should not be penalized for the disparity in the two timeframes caused by legacy systems.

- The CAISO should test the proposal on a potential data set to determine if the methodology - for example, the different proposed levels of aggregation for generation and load – would work as intended and not unduly discriminate between generation sources or between generation and load. For, example, if the 33% Integration Study found that there was an increase of 20% in FRP need due to VERs, but that 80% of FRP costs would be allocated to VERs under the proposed allocation methodology, that result should lead the CAISO to reconsider the proposed methodology.

Finally, the CAISO should consider revising the pricing formula, e.g.:

- Instituting a two-tier (or even three-tier) pricing structure. The current single-tier proposal would allocate, based on deviations, both the cost to manage those deviations and also any additional costs from other factors like the CAISO's forecasting errors (and potential resulting procurement beyond that needed to manage the actual deviations). The cost to manage actual deviations should be allocated based on deviations, while the cost of those other factors should be spread to the market. This would increase the transparency of the design and help indicate the degree of any CAISO FRP over-procurement instead of masking it.

- Charging only for deviations that contribute to the CAISO's FRP need (i.e., are in the direction of the need), and not those that actually help (i.e., are in the opposite direction of the need). Thus, downward deviations should not be charged in intervals when the CAISO is using Upward FRP, and upward deviations should not be charged in intervals when the CAISO is using Downward FRP. The longer monthly settlement period should allow the CAISO to assess higher charges for resources having a higher correlation with system need relative to resources having a lower correlation with system need.