

Stakeholder Process: Expanding Metering and Telemetry Options**Summary of Submitted Comments**

Stakeholders submitted three rounds of written comments to the ISO on the following dates:

- Round One, 11/20/14
- Round Two, 05/27/15
- Round Three, 06/24/15

Stakeholder comments are posted at: <http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=66A6B052-E2D5-48C7-89C4-9414B36C0001>

Other stakeholder efforts include:

- Web conference, 11/13/14
- Web conference, 05/19/15
- Web conference, 06/17/15

Management proposal	SolarCity, Stem, and Advanced Micro-Grid Solutions	Wooster Engineering Specialties	Ohm Connect	Management response
<p>Enable distributed energy resources to aggregate together with certain restrictions, at a single pricing node or across multiple pricing nodes, within a single sub load aggregation point to meet the ISO's 0.5 MW minimum participation requirement.</p>	<p>Support with qualification.</p> <p>Request that future initiatives consider relaxing or eliminating the restrictions on heterogeneous aggregations across multiple pricing nodes.</p> <p>Request clarification on the interconnection process for distributed energy resource aggregations and request clarification about multi-use resources.</p>	<p>Support.</p> <p>Requests clarification about dual use resources.</p>	<p>Did not specify position.</p> <p>Believes that some flexibility to mix sub-resource types in an aggregation without compromising the ISO's reliable modeling and operation of the grid.</p>	<p>In response to concerns about the limitations described in the proposal, Management responds that they are necessary to limit the adverse effects that aggregations across multiple nodes may have on the ISO ability to accurately assess congestion and identify critical constraints, they encourage the ISO to consider further enhancements in future stakeholder initiatives. Management will consider reevaluating the appropriateness of these limitations after gaining a full 12 months of operational experience with several aggregations of between 10 and 20 MW across multiple pricing nodes. Until such time as the ISO has gained this experience, Management believes these limitations represent a prudent and reasonable starting place.</p> <p>Management responds to issues raised about multi-use or dual-use resources by clarifying that these issues will be explored in the energy storage and distributed energy resources ("ESDER") initiative. More information about this initiative is available on the ISO's website at http://www.aiso.com/informed/Pages/StakeholderProcesses/EnergyStorage_AggregatedDistributedEnergyResources.aspx</p> <p>Management responds to issues raised about interconnection processes for distributed energy resources by clarifying that it is the distribution utility and not the ISO that specifies and administers the connection of resources to a distribution system. Management further clarifies that the distributed energy resource provider must comply with applicable utility distribution company tariffs and requirements of the applicable local regulatory authority, in addition to interconnection requirements. Also, prior to participating in the ISO market a distributed energy resource provider would need to successfully complete the ISO new resource implementation process for its aggregation and this process includes verification that the interconnections for the sub-resources in an aggregation have been approved by the appropriate distribution utility.</p>

Management proposal	MelRok	Pacific Gas & Electric	California Energy Storage Alliance	Olivine	Management response
<p>Enable distributed energy resources to aggregate together with certain restrictions, at a single pricing node or across multiple pricing nodes, within a single sub load aggregation point to meet the ISO's 0.5 MW minimum participation requirement.</p>	<p>Fully supports. Requests clarification if distributed energy resources are limited to renewables or can also include fuel-based generation such as biomass or fuel cells. Requests clarification about dual use resources.</p>	<p>Support with qualification. Believes that there are issues associated with aggregation of behind-the-retail-meter distributed energy resources that should be resolved in a third phase of this initiative carried forward in conjunction with local regulatory authorities. Believes that these issues should be resolved prior to implementing an aggregation framework for behind-the-retail-meter distributed energy resources.</p>	<p>Strongly supports, with qualification. Requests further efforts to define metering and telemetry configurations that will allow distributed energy resources to participate both behind and in front of the retail meter. Requests clarification on multi-use resources.</p>	<p>Fully supports. Believes that issues must still be resolved at the distribution, retail, and local regulatory authority levels. Encourages ISO to work with the CPUC and other local regulatory authorities on metering requirements for distributed energy resources.</p>	<p>Regarding what comprises distributed energy resources, Management clarifies that for purposes of this proposal a distributed energy resource means any distribution connected resource and is not limited to renewables.</p> <p>In response to concerns raised about unresolved issues at the distribution, retail, and local regulatory authority levels, Management clarifies that the distributed energy resource provider must comply with applicable utility distribution company tariffs, requirements of the applicable local regulatory authority, as well as interconnection requirements. To the extent that in some cases such rules or requirements may either need further clarification or be developed to enable distributed energy resources (especially those behind-the-retail-meter or end-use meter customer meter) to take advantage of Management's proposed aggregation framework, Management believes its proposal is an important first step to open a pathway for these resources to participate and should not wait until every issue at the distribution, retail, and local regulatory level is resolved. To be very clear, Management's proposal does not mandate that all distributed energy resources enter into an aggregation. Rather, Management's proposal simply establishes a framework for distributed energy resources to aggregate together to meet the ISO's 0.5 MW minimum participation requirement if they elect to do so and if rules and requirements at the distribution, retail, and local regulatory levels allow them to do so.</p> <p>See Management's previous response to the multi-use issue.</p>

Management proposal	Californians for Renewable Energy	TeMix	Management response
<p>Enable distributed energy resources to aggregate together with certain restrictions, at a single pricing node or across multiple pricing nodes, within a single sub load aggregation point to meet the ISO's 0.5 MW minimum participation requirement.</p>	<p>Oppose.</p> <p>Opposes the proposal on the grounds that it is not offering customer-generators a mechanism to transition to a standard contract or tariff that complies with Public Utility Regulatory Policies Act of 1978.</p>	<p>Oppose.</p> <p>States three reasons for opposing the proposal: (1) it is extremely complex; (2) it requires aggregation of most distributed energy resources; and (3) it is the first step toward a distribution system operator that extends the ISO span of control to the dispatch of distributed energy resources.</p>	<p>Management responds that CARE's comments misapprehend the proposal, which seeks to establish a mechanism for distributed energy resources to offer their output into the ISO's wholesale markets through an aggregation arrangement, if they elect to do so. The proposal does not mandate that all distributed energy resources enter into an aggregation and does not substitute for any requirements under PURPA. CARE's comments also suggest that the ISO is subject to other requirements of California Assembly Bill 327 enacted in 2013 that pertains to net metering for eligible customer-generators. That is not the case. The relevant provisions of Assembly Bill 327 cited by CARE apply to large electrical corporations subject to the jurisdiction of the California Public Utilities Commission.</p> <p>Management responds to TeMix's comments that its proposal is (1) relatively simple in that it relies on existing market models and tariff rules to the maximum extent possible and avoids major market system changes; (2) responsive to developers of small distributed energy resources who have requested an aggregation framework enabling their market participation; and (3) limits its dispatch control to the aggregated single market resource modeled at pricing nodes on the ISO grid, not the distribution grid.</p>